Louisville Metro Air Pollution Control District
850 Barret Avenue
Louisville, Kentucky 40204-1745

Title V Operating Permit

Permit No.: 147-97-TV (R2) Plant ID: 0072

Effective Date: 03/31/2011 Expiration Date: 10/31/2015

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Ford Motor Company-Louisville Assembly Plant
2000 Fern Valley Road
Louisville, Kentucky 40213

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Permit Writer: Shannon Clemons Hosey

Air Pollution Control Officer

Administratively Complete: 09/20/2005 and 10/06/2008
Date of Public Notice: 07/19/2010
Date of Proposed Permit: 03/31/2011

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PAL/Title V Permit Revisions/Changes

Revision No.	Issue Date	Public Notice Date	Type	Attachment No./Page No.	Description
N/A	10/6/2000	4/23/2000	Initial	Entire Permit	Initial TV Permit Issuance
R1	9/17/2010	7/19/2010	Initial/ Renewal	Entire Permit	5 year Renewal; Incorporate PAL, STAR TAC requirements, RO change, DRE for E-coat control device change and 112(J) Part 1 & 2 applications.
R2	3/31/2011	NA	Admin Revision	Pages 43,45 and 50	Revision to include permit 229-96-O, add NOx RACT language and correct Methanol Tank Vapor Pressure

Application #	Date	Type
9761	09/09/2004	TV Revision (Multi Request)
9509	08/28/2003	TV Revision (Stage II) Request
10016	07/22/2005	TV Admin Change
10457	07/22/2005	TV Renewal
10789	12/07/2007	TV Revision Request DRE for E-Coat System Control Device
11033	07/17/2008	TV Revision Request Reporting Revision
11042	08/07/2008	TV/PAL Renewal application - Updated
11230	03/06/2009	112(J) Part 1 & 2 applications
11319	04/30/2009	TV RO Change

Abbreviations and Acronyms

AFS - Airs Facility Subsystem
AIRS - Aerometric Information Retrieval System
APCD - Air Pollution Control District
ASL - Adjusted Significant Level
atm - Atmosphere
BACT - Best Available Control Technology
Btu - British Thermal Unit
CEMS - Continuous Emission Monitoring System
CAAA- Clean Air Act Amendments (15 November 1990)
HAP - Hazardous Air Pollutant
hr - hour
lbs - Pounds
l - Liter
MACT- Maximum Achievable Control Technology
m - Meter
mg - Milligram
mm - Millimeter
MM - Million
MOCS- Management of Change System
NAICS- North American Industry Classification System
NSR - New Source Review
NO_x - Nitrogen oxides
NSPS - New Source Performance Standards
PAL - Plant-wide Applicability Limit
PM - Particulate Matter
PM_{10} - Particulate matter less than 10 microns
ppm - Parts per million
PSD - Prevention of Significant Deterioration
PMP - Preventive Maintenance Plan
psia - Pounds per square inch absolute
RACT - Reasonably Available Control Technology
SC - Specific Condition
SIC - Standard Industrial Classification
SIP - State Implementation Plan
SO_2 - Sulfur dioxide
TAC - Toxic Air Contaminant
TAL - Threshold Ambient Limit
TAP - Toxic Air Pollutant
tpy - Tons per year
UTM - Universal Transverse Mercator
VOC - Volatile Organic Compound

Preamble

Title V of the Clean Air Act Amendments of 1990 required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Air Pollution Control District (APCDJC) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations".

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit general conditions define requirements which are generally applicable to all Title V companies under the jurisdiction of APCDJC. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the general conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The general conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The source's Title V permit may include a current table of "insignificant activities." Insignificant activities are defined in District Regulation 2.16 section 1.22, as of the date the permit was proposed for review by U.S. EPA, Region 4. Insignificant activities identified in District Regulation 2.02, Section 2 may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4. Insignificant activities identified in District Regulation 2.02, Section 2 shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.

General Conditions

1. **Compliance** - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. (Regulation 2.16, sections 4.1.3, 4.1.13.1 and 4.1.13.7)

2. **Compliance Certification** - The owner or operator shall certify, annually or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification directly to the following address as well as to the District, as set forth in Regulation 2.16, section 4.3.5.4:

   US EPA - Region IV
   Air Enforcement Branch
   Atlanta Federal Center
   61 Forsyth Street
   Atlanta, GA 30303-8960

3. **Compliance Schedule** - A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:

   a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.

   b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.

4. **Duty to Supplement or Correct Application** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, it shall,

upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

5. **Emergency Provision**

a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

i. An emergency occurred and that the owner or operator can identify the cause of the emergency.

ii. The permitted facility was at the time being properly operated.

iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.

iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. (Regulation 2.16, sections 4.7.1 through 4.7.4)

6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. (Regulation 2.08, section 1.3)

7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.

8. **Enforceability Requirements** - Except for the conditions that are specifically designated as “District Only Enforceable Conditions”, all terms and conditions of this permit,

including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. (Regulation 2.16, sections 4.2.1 and 4.2.2)

9. **Enforcement Action Defense**

a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation. (Regulation 2.16, sections 4.1.13.2 and 4.1.13.3)

10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.

11. **Information Requests** - The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. (Regulation 2.16, section 4.1.13.6)

If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA. (Regulation 2.07, section 10.2)

12. **Insignificant Activities -** The owner or operator shall:

a. Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. (Regulation 2.16, section 5)

b. Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year. (Regulation 2.16, section 4.3.5.3.6)

13. **Inspection and Entry** - Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:

a. Enter the premises to inspect any emissions-related activity or records required in this permit.

b. Have access to and copy records required by this permit.

c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.

d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements. (Regulation 2.16, section 4.3.2)

14. **Monitoring and Related Record Keeping and Reporting Requirement** - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. The owner or operator shall submit all required monitoring reports at least once every three months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be January 1st through March 31, April 1 through June 30th, July 1st through September 30 and October 1 through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement. All quarterly compliance reports shall include the following certification statement per Regulation 2.16.

· "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete".

· Signature and title of company responsible official.

If a change in the "Responsible Official" (RO) occurs during the term of this permit, the owner or operator shall provide written notification (Form 9400-A and Form AP-0208) to the District within 30 calendar days following the date a change in the designated RO occurs for this facility.

The quarterly compliance reports are due on or before the following dates of each calendar year:

Reporting Period	Report Due Date
January 1 through March 30	May 30
April 1 through June 30	August 29th
July 1 through September 30	November 29
October 1 through December 31	March 1st[1]

Note:
[1] The date for leap years is February 29.

15. **Off-permit Documents**- Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5. (Regulation 2.16, section 4.1.5)

16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.

17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, sections 2.3 and 5.4.

18. **Permit Application Submittal** - The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.

19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.

20. **Permit Renewal, Expiration and Application** - Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.

21. **Permit Revisions** - No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. (Regulation 2.16, section 4.1.16)

22. **Permit Revision Procedures (Minor)** - Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.

23. **Permit Revision Procedures (Significant)** - A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and Permit renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.

24. **Permit Revocation and Termination by the District** - The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1.1 through 5.11.1.5. For purposes of Section 5, substantial or unresolved noncompliance includes, but is not limited to:

a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment.

b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District.

c. Knowingly making any false statement in any permit application.

d. Noncompliance with Regulation 1.07, section 4.2; or

e. Noncompliance with KRS Chapter 77.

25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.

26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.

27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.

28. **Public Participation** - Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, Section 1; and 2.16, sections 5.1.1.2 and 5.5.4.

29. **Reopening For Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.

30. **Reopening for Cause by EPA** - This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.

31. **Risk Management Plan (112(r))** - For each process subject to Section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.

32. **Severability Clause** - The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. (Regulation 2.16, section 4.1.12)

33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.

34. **Startups, Shutdowns, and Upset Conditions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.

35. **Submittal of Reports, Data, Notifications, and Applications**

a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.11.7 shall be submitted to:

Louisville Metro Air Pollution Control District
850 Barret Ave
Louisville, KY 40204-1745

b. Documents which are specifically required to be submitted to EPA as set forth in Regulation 2.16 sections 3.3, and 5.8.5 shall be mailed to EPA at the following address:

US EPA - Region IV
APTMD - 12th floor
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-3104

36. **Other Applicable Regulations** - The owner or operator shall comply with all applicable requirements of the following:

Regulation	Title
1.01	General Provisions
1.02	Definitions
1.03	Abbreviations And Acronyms
1.04	Performance Tests
1.05	Compliance With Emissions Standards And Maintenance Requirements
1.06	Source Self-Monitoring and Reporting
1.07	Emissions During Shutdowns, Malfunctions, Startups, and Emergencies
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
2.01	General Application
2.02	Air Pollution Regulation Requirements and Minor Facility Exemptions
2.03	Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/ Renovation Permits
2.07	Public Notification for Title V, PSD, and Other Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Suspension

Regulation	Title
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.16	Title V Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)

District Only Enforceable:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors
2.08	Emission Fee, Permit Fees and Permit Renewal Procedures
5.01	Standards for Toxic Air Contaminants and Hazardous Air Pollutants
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants

37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:

    a. Any facility having any refrigeration equipment normally containing fifty (50) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added according to 40 CFR 82.166;

    b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;

c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166.

d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;

e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40
CFR 82.166;

f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;

g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40CFR82 Subpart A, Production and Consumption Controls. (Regulation 2.16, section 4.1.5)

Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL):

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
2.03	Permit Requirements Non-Title V Construction and Operating Permits and Demolition/Renovation Permits	1, 2, 3, 4, & 5
2.05	Prevention of Significant Deterioration of Air Quality	1
40 CFR 52.21	Approval and Promulgation of Implementation Plans	

Plant-wide Applicability Limits	
Pollutant	**Tons/Year****
VOC	1,316
PM	21.2
PM_{10}	21.2
$PM_{2.5}$	17.2
NO_X	99.0
SO2	39.33
CO	151.4

**** Represents a 12-month rolling total**

S1. Plant-wide Applicability Limit (PAL) Specific Conditions (Regulation 2.05, section 1 & Regulation 2.03)

a. Under the provisions of this PAL, if the permittee adds a new emission unit or modifies an existing unit, the unit would not be subject to major NSR (non-attainment or PSD) as long as the PAL emission limits (ton per year limits in the above table) are not exceeded.

b. Operational and Equipment Modifications

1) Ford Motor Company Louisville Assembly Plant is authorized to perform the physical or operational changes, or changes deemed consistent with those physical or operational changes, without applying for or obtaining a construction permit or amendment from the permitting authority pursuant to Regulation 2.03 as long as the PAL is not exceeded.

2) The permittee shall maintain a log of equipment installed and/or modified and the date on which construction and/or modification and operation began. In addition, the permittee shall maintain a log of equipment

removed from the installation and the date on which it was removed. The log must account for all equipment present at the installation at any given time. Attachment A, or equivalent forms may be used for this purpose.

3) If the permittee wishes to make physical or operational changes that are not deemed consistent with the physical or operations changes listed in this construction permit and are not exempt from the construction permit rule, then the permittee must first apply for and obtain a construction permit or amendment.

c. Notification of Actual Construction of Change:

Ford Motor Company Louisville Assembly Plant shall submit written notification to the permitting authority at least ten days prior to the actual construction change to or addition of any emission unit covered by this PAL permit that are not excluded under Specific Condtions S1.h. The notification shall contain the following :

1) Detailed description of the physical or operational change including the effect on existing equipment;

2) A plant layout diagram with representation of existing equipment and physical or operational changes;

3) A schedule of construction activities related to the change;

4) A statement of applicability for any New Source Performance Standard, National Emissions Standard of Hazardous Air Pollutants and /or state regulations not identified as core requirements in the operating permit;

5) An emissions calculation sheet for the change;

6) A statement of verification that the physical or operational change will not result in installation emissions that exceed the limitations stated in Specific Conditions S1.b.; and

7) A summary of the impact analysis on the capture efficiency as outlined in Specific Condition S2.i. for those units where compliance with an applicable emission limit or standard is dependent upon the use of the control device.

d. Portions of the notification such as descriptions of changes and associated applicability determination shall become an enforceable part of this construction permit upon receipt by the permitting authority.

e. The permitting authority may disapprove any activity that has not demonstrated to

the satisfaction of the Program to be related to the changes. At the time, the permittee shall cease construction of the change until an appropriate authorization of the activities is obtained (such as a construction permit, if necessary).

f. Notification of Actual Start-up of Change:

Ford Motor Company Louisville Assembly Plant shall submit written notification to the permitting authority at least ten days prior to the actual start-up or operation of any change listed in this PAL permit. The notification shall contain the following :

1) Reference to the notification of actual construction including date of notification and brief description of change;

2) Verification that the physical or operational change was completed as described in the original notification; and

3) Scheduled date operations will be commenced.

g. It is a violation of this construction permit for Ford Motor Company Louisville Assembly Plant to construct, modify or operate the installation not in accordance with the notification Specific Condtions S1.f.

h. The notification letter identified in c. and f. above is not required for sources that are otherwise exempt from the requirement to obtain a permit or are included in the list of insignificant sources in the Appendix to this Title V Operating Permit.

S2. PAL Monitoring and Record Keeping Requirements (Regulation 2.05, section 1 & Regulation 2.03)

a. The permittee shall maintain a copy of all records necessary to determine compliance with requirements of the PAL, including a determination of each emission unit’s monthly and twelve-month rolling total emissions, for five years from the originating date of such record.

b. The permittee shall retain a copy of the following records for the duration of the PAL effective period plus five years:

1) A copy of the PAL permit application and any applications for revisions to the PAL; and

2) Each annual certification of compliance pursuant to Title V and the data relied on in certifying compliance.

3) Copies of any notification for any new or modified emission units that is not subject to the requirement to obtain a Permit to Construct under the provisions of the PAL.

c. The permittee shall monitor all emission units at the facility in accordance with the specific monitoring requirements contained in each emission unit.

d. Ford Motor Company Louisville Assembly Plant shall submit a quarterly emissions report to the permitting authority within 60 days after the end of each reporting period.

The reports shall contain the following information:

1) Identification of owner and operator and the permit number;

2) Total annual emissions in tons per year based on a 12-month rolling total for each month in the reporting period.

3) A summary of all data relied upon, including but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PM, PM_{10}, $PM_{2.5}$, NO_x, SO_2, CO and VOC emissions;

4) A list of any emissions units modified or added to the installation during the preceding three-month period;

5) The number, duration, and cause of any deviations or monitoring malfunctions, and any corrective action taken;

6) A notification of shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculations of the emissions.

7) A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.

e. Quality Assurance/Quality Control:

Following completion of the initial performance test reports, Ford Motor Company Louisville Assembly Plant shall maintain an operation and maintenance plan on site at all times. A table of contents of the plan shall be submitted to the permitting authority with sixty (60) days of receipt of the performance test reports required of Specific Condition S6.c. The plan should be detailed, specific to the Louisville Assembly Plant and include the following information:

1) A preventative maintenance program for avoidance of excess emissions which shall include all maintenance activities, with inspection schedule, repair actions, and replacements inventory.

2) A range of operating conditions and outlet variables for normal operation.

3) A summary of operating conditions and outlet variables for all control equipment that will be monitored for malfunction or breakdown and a description of the method of detecting and informing responsible personnel of any malfunction or breakdowns, including alarm systems, lights and other indicators.

4) A description of the generic corrective procedures that will be taken in the event of a malfunction or breakdown in order to restore compliance with the applicable emission limitations and permit conditions (e.g. reducing of production rate).

f. Capture and Control Equipment:

The specified control device (e.g. thermal oxidizer, carbon adsorber, and /or fluidized bed carbon concentrator) must be in use at all times when a control efficiency is claimed for compliance with the VOC emissions limitation. When a control efficiency is claimed, the control device shall be operated in accordance with applicable specifications and with the temperature range determined in Specific Conditions S6.

g. Thermal Oxidizer Requirements:

1) The operating temperature shall be continuously monitored and recorded when a control efficiency is claimed for compliance with the VOC emissions limitation. The operating temperature of the thermal oxidizer shall be maintained on a rolling 3-hour average within 50 degrees Fahrenheit of the average temperature of the oxidizer recorded during the compliance test specified in Specific Condition S6. The acceptable temperature range may be reestablished by performing a new set of emission tests. The most recent sixty months of records shall be maintained on-site and shall be made immediately available upon request.

2) An assessment of thermal oxidizer valve operation and leakage shall be conducted as part of the maintenance and inspection activities, at least annually.

h. Carbon Adsorber and Fluidized Bed Concentrator Requirements:

1) Ford Motor shall monitor the desorption gas inlet temperature on the

carbon adsorption and/or the SCR temperature on a fluidized bed concentrator unit with an appropriate monitoring device to ensure that the device is operating properly when a control efficiency is claimed for compliance with the VOC emissions limitation.

2) For each carbon adsorption device and/or fluidized bed concentrator unit, the monitoring device required in 1) above shall be identified, the parameters that will be monitored (e.g. desorption temperature), the frequency that the unit is monitored, and the temperature range as determined in Specific Condition S6 for each control device.

i. Capture Equipment Requirements:

1) Ford Motor shall evaluate changes that involve emissions directed to emission control equipment where compliance with an applicable emission limit or standard is dependent upon the use of the control device subject to the change for potential impacts to emission control equipment capture efficiency. This evaluation shall include the following:

i. An impact analysis of the change on the capture efficiency;
ii. A determination of the need for a new capture efficiency test based on the impact analysis;
iii. A summary of the evaluation to be included in the Notification of Actual Construction as stated in Specific Condition S1.c.

2) Within 180 days of start up of new projects, Ford Motor shall develop a monitoring plan for each capture system (booth) that:

i. Identifies the operating parameter(s) to be monitored to assure capture efficiency,
ii. Explains why this parameter is appropriate for demonstrating ongoing compliance,
iii. Identifies the specific monitoring procedures, and
iv. Specifies the operating parameter value or range of values (or the procedures for establishing the values) that shall be maintained to demonstrate capture efficiency is being maintained.

3) Ford Motor shall install and maintain, for any intermittently controllable work station, a system to monitor when bypass of the control device system occurs while the work station is in operation.

4) Ford Motor shall maintain an operating and maintenance log for the capture and control systems (enclosures and thermal oxidizers) for a period of (60) sixty months which shall include the following:

i. Incidents of malfunction, with impact on emissions, duration of

event, probable cause, and corrective actions; and

ii. Maintenance activities, with inspection schedule, repair actions, and replacement, etc.

iii. A written record of regular inspection schedule, the date and results of all inspections including any actions or maintenance activities that result from that inspection.

j. Ford Motor LAP has the flexibility to change any of their control devices as long as Ford Motor can demonstrate to the District upon request that the new equipment has the same or better control efficiency as the current control devices. The requirement for the same or better control efficiency applies only to situations where compliance with an applicable emission limit or standards is dependent upon the use of a control device.

S3. PAL Permit Requirements (Regulation 2.05, section 1 & Regulation 2.03)

a. The PAL shall be effective for ten years. The PAL term commences on the date of issuance of the PAL permit (245-09-C (R1)). The PAL shall also remain effective during the periods of review of Title V renewal applications regardless of the status of the application or permit shield.

b. Reopening of the Construction Permit:

1) The permitting authority may reopen this construction permit to accomplish the following actions:

i. Revise to reflect an increase in the PAL as outlined in Specific Condition S3.k.

ii. Reduce the PAL to reflect newly applicable Federal and/or State requirements with compliance dates after the issuance of this construction permit.

iii. Reduce the PAL if the permitting authority determines that a reduction is necessary to avoid causing or contributing to a National Ambient Air Quality Standard or Prevention of Significant Deterioration increment violation, or to an adverse impact on air quality.

2) All reopening that increase the PAL level are required to be placed on public notice for at least a thirty (30) day period for submittal of public comment.

c. Permit Application Submission Requirements:

If the permittee chooses to renew this PAL, the permittee shall submit a complete application between six and eighteen months prior to the expiration of the PAL. This PAL shall not expire until a revised PAL permit is issued if a complete

application is received by Louisville Metro Air Pollution Control District within the time frame specified.

d. PAL Renewal Requirements:

1) A complete application shall consist of written documentation and/or calculations for the following item:

i. A proposed PAL level;
ii. A list of all emissions units with applicable Federal or State requirements;
iii. The potential emissions of all current equipment at the installation;
iv. Identification of the baseline period;
v. Baseline actual emissions; and
vi. A compliance plan for the proposed PAL.

2) The permitting authority will have the final authority to set the new *plant-wide* emissions limitation based on the following guidelines:

i. If the baseline actual emissions at the time of renewal are equal to or greater than eighty percent of the PAL, the PAL may be renewed at the same level.
ii. The PAL may not be set at a level that is greater than the potential to emit of the entire installation.
iii. The PAL shall be adjusted to account for any applicable State or Federal requirement with a compliance date that occurs during effective period of this PAL.
iv. A PAL level higher than the current PAL level cannot be approved unless otherwise approved through Specific Condition S3.j.

3) Any request to renew the PAL level is required to be placed on public notice for at least a thirty (30) day period for submittal of public comment.

e. A complete application shall consist of a proposed allowable emission limitation for each emissions unit (or each group of emissions units) by distributing the PAL allowable emissions for the installation among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, such distribution shall be made as if the PAL had been adjusted.

f. The PAL limits for each regulated pollutant will remain in effect until a revised permit is issued by the Air Pollution Control District.

g. Any physical change or change in the method of operation at the installation that meets the definition of major modification will be subject to major construction permitting requirements.

h. Ford Motor Company Louisville Assembly Plant shall continue to comply with any State or Federal applicable requirements that may have applied either during the PAL effective period or prior to the PAL effective period.

i. Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level:

i. Is not a major modification for the PAL pollutant;
ii. Does not have to be approved through the PSD program; and
iii. Is not subject to the provisions addressing restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program.

j. Increase of the PAL during the Effective Period:

1) If Ford Motor Company Louisville Assembly Plant wishes to alter this construction permit to allow the installation to emit more than the limit of any one of the regulated pollutants, Ford Motor shall submit a complete application to request an increase in the PAL meeting all the requirements for a major modification.

2) A complete application shall consist of written documentation and/or calculations to accomplish the follow items:

i. Identify the emissions units contributing to the increase in emissions so as to cause Ford Motor emissions to equal or exceed the PAL.
ii. Determine the Best Available Control Technology (BACT) equivalent controls for each emission unit using current technology.
iii. Demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the new or modified emissions units exceeds the PAL.
iv. Comply with the provisions of a current BACT analysis for all emissions unit(s) identified in Specific Condition S3.j.(2)i.

3) The revised PAL level shall be placed on public notice for at least thirty (30) day period for submittal of public comment.

k. Operational Requirements from Previous Construction Permits: (See Comment 3)

1) Upon request by the Air Pollution Control District, Ford Motor Company Louisville Assembly Plant shall supply to the Air Pollution Control District a drawing showing rooftop locations of current process exhaust

stacks.

2) Each stack must be identified by the associated source operation name and a short code that Ford chooses.

3) There must be a unique code for all stacks associated with each new emission unit.

S4. PAL Compliance Demonstration (Regulation 2.05, section 1 & Regulation 2.03)

The owner or operator shall maintain records and emission calculations as described below to demonstrate compliance with the PAL. Further, compliance with all other permit conditions and applicable regulations identified within this permit shall be demonstrated using the methods prescribed for each Emission Unit and for each Emission Point.

a. Emissions calculations to demonstrate compliance with the PAL include VOC, $PM/PM_{10}/PM_{2.5}$, CO, SO_2 and NOx emissions from startups, shutdowns, and malfunctions.

b. The permittee shall determine monthly VOC, $PM/PM_{10}/PM_{2.5}$, CO, SO_2 and NOx emissions in accordance with the Monitoring and Record Keeping Requirements for each emissions unit for the purpose of summing *plant-wide* VOC, $PM/PM_{10}/PM_{2.5}$, CO, SO_2 and NOx emissions and determining the rolling, 12-month emissions for each pollutant.

c. Compliance with applicable emission rates for the e-coat, guidecoat and topcoat systems can be demonstrated based upon the recordkeeping and emissions calculation methods described in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22). The same information can be utilized to determine monthly emission rates for support of PAL compliance.

d. Compliance with annual emission rates for sealer, black-out/wax, glass installation and purge/cleaning solvent operations, and all other VOC emission units, shall be demonstrated using mass balance calculation methods. Monthly material usage data and the applicable VOC content of each material shall be maintained.

e. Compliance with mass VOC emission limitations for sealer, black-out/wax, glass installation and purge/cleaning solvent operations, shall be demonstrated using mass balance calculation methods. Monthly material usage data and the applicable VOC content of each material shall be kept. Daily emission rates shall be determined by prorating monthly usage based on daily production levels.

$$VOC\ Value = \sum_{i=1}^{n} U_i V_i (1 - C_i D_i)$$

Where:

U = material usage
V = VOC content
C = capture efficiency
D = destruction efficiency
i = number of operating days

The owner or operator shall correct capture and destruction efficiency values as appropriate to reflect equipment malfunction, downtime or other periods of reduced performance. Daily usage of each material shall be prorated from monthly values based on daily production:

$$U_{Daily} = U_{Monthly} \frac{P_{Daily}}{P_{Monthly}}$$

Where:

U_{Daily} = material usage for a particular calendar day
$U_{Monthly}$ = recorded material usage for a particular month
P_{Daily} = recorded vehicle production for a particular day
$P_{Monthly}$ = total vehicle production for a particular month

For these operations, the VOC content of each material used shall be determined using U.S. EPA Reference Method 24, manufacturer's formulation data, or an approved alternative method.

f. To demonstrate compliance with the PAL emission limits, the permittee may use either of the following:

VOC Emission Rate Annual Emission Calculation (tons VOC/year) (12 month rolling time period)

VOC Emission Rate Annual Emission Calculation (tons VOC/year) (12 month rolling time period)

The owner or operator shall update and correct capture and destruction efficiency values as appropriate to reflect equipment malfunction, downtime, or other periods of reduced performance.

g. To demonstrate compliance with *plant-wide* NO_x emission limits and to determine PM, PM_{10} and $PM_{2.5}$ emissions associated with natural gas combustion, the owner or operator shall maintain monthly *plant-wide* natural gas usage records. Emissions shall be determined using prorated usage rates and appropriate U.S. EPA AP-42 Emission Factors or vendor emissions data.

$$NOx / PMaValue = \sum_{i=1}^{n} UiEF(1 - Ci)$$

Where:
a = PM subscript for total PM, PM_{10}, or $PM_{2.5}$
U = material usage
EF = emission factor
C = control efficiency
i = number of operating months

h. To demonstrate compliance with annual *plant-wide* $PM/PM_{10}/PM_{2.5}$ emissions associated with surface coating operations, the owner or operator shall maintain monthly *plant-wide* coating usage records. Emissions shall be determined using materials usage rates, solids content, transfer efficiency and particulate control device efficiency, or some combination of these parameters. As an alternative, the facility may rely on stack test data* or design criteria if such data is available and can provide a more process-specific emission estimation technique.

∗Stack test results used for $PM_{2.5}$ shall not include condensable particulate matter as specified in 40 CFR Part 51.166 as the permit is issued prior to January 1, 2011.

i. The permittee shall complete the calculations specified in S4.a. through h. no later than 30 days after the end of the month for which emissions are being calculated. The permittee shall report to the Air Pollution Control District, 850 Barret Ave, Louisville, KY 40204, no later than ten (10) days after the calculations are complete for the month during which the records indicate that the source exceeds the limitations of the PAL.

j. The permittee shall keep documentation of any emission factors used to demonstrate compliance with the PAL. Emission factors must be obtained from the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, the most recent stack performance test results, a mass balance approach using the Material Safety Data Sheets (MSDS) of all materials, and/or by a method approved by the permitting authority.

k. The permittee shall keep documentation of any overall control efficiencies used to demonstrate compliance with the PAL. Overall control efficiency is the product of the capture efficiency and control efficiency of the pollution control device.

l. Operational Requirement:

The permittee shall keep the solvents and cleaning solutions in sealed containers whenever the materials are not in use. The permittee shall provide and maintain suitable easily read permanent markings on all solvent and cleaning solution containers used with this equipment.

S5. PAL Reporting Requirements (Regulation 2.05, section 1 & Regulation 2.03)

The owner or operator shall submit a summary of required monitoring reports at least once every three months**,** unless more frequent reporting is required by an applicable requirement.

a. Quarterly report:

The reporting period shall be January 1st through March 31, April 1 through June 30th, July 1st through September 30 and October 1 through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period.

i. The identification of owner and operator, the facility ID, and the permit to-Construct numbers or any applicable permit-to-install.
ii. Total annual emissions (tons per year) based on a twelve-month rolling total for each month in the reporting period.
iii. A summary of the data relied upon, including, but not limited to, any quality assurance or quality control data, in calculating the monthly and annual PAL pollutant emissions. A copy of the data relied upon shall be maintained on site for a minimum period of three years.
iv. A list of any emissions units modified or added to the major stationary source during the preceding six-month period (including exempt and insignificant sources).
v. The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.

vi. A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the monitored pollutant or the number determined by method included in the PAL permit

vii. A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.

b. Deviation report:

The major stationary source owner or operator shall promptly submit reports of any deviation from or exceedance of the PAL requirements, including periods where no monitoring is available. The deviation reports shall be submitted within the time limits prescribed by Regulation 1.06. The reports shall contain the following information:

i. The identification of owner and operator, the facility ID, and the permit numbers for any applicable permits;
ii. The PAL requirement that experienced the deviation or the exceedance;
iii. Emissions resulting from the deviation or the exceedance; and
iv. A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.

c. Re-validation results:

The owner or operator shall submit to the Louisville Metro Air Pollution Control District the results of any re-validation test or method within three months after completion of such test or method.

S6. PAL Performance Testing (Regulation 2.05, section 1 & Regulation 2.03)

a. Ford Motor shall conduct performance tests on existing control devices in the following table and any future control devices used for compliance with the PAL in accordance with the schedule identified in item c. below.

Control Device	Location Description
Thermal Oxidizer	E-Coat Oven RTO
	E-Coat Oven (3rd Pass) RTO
	E-Coat Oven (1st and 2nd Pass)
	Guidecoat Oven (1st and 2nd Pass)
	Guidecoat Oven (3rd Pass)
	North Main Enamel Oven RTO
	North Main Enamel Booth RTO

	South Main Enamel Booth RTO
	South Main Enamel Oven RTO
Carbon Adsorber	North Main Enamel Booth
	South Main Enamel Booth

Ford Motor shall determine the VOC destruction and /or removal efficiencies and operating parameters of these control devices when all the processed controlled by these devices are in normal operation.

b. For each capture system, Ford Motor shall:

1) Confirm that the capture system continues to meet the requirements of EPA Method 204 from an approved performance test with no changes to operating parameters, or

2) Conduct a performance test to determine the capture efficiency and establish the value or range of values for the selected operating parameter(s) when all the processes controlled by these devices are in normal operation.

c. Within the initial 10-year term of the PAL permit and at least within 10 years of the most recent performance tests, Ford Motor Company Louisville Assembly Plant shall:

1) Conduct performance tests to verify the operating parameters and/or control efficiencies of the control devices; and

2) Confirm the capture efficiencies of the total or partial enclosures by Specific Condition S6.b.1) or S6.b.2).

3) The emission testing requirements are designed to obtain representative emission testing. However, it is recognized that circumstances or other reasons may arise that would necessitate changes to the testing requirements. Therefore, upon mutual agreement between the permittee and the District, the testing requirements specified in this permit may be changed.

For any control device installed subsequent to the issuance of this construction permit, performance tests shall be preformed no later than 180 days after initial start-up of the control equipment.

d. Testing shall be conducted in accordance with the procedures outlined in Specific Condition S6.e. Ford Motor shall maintain a record of the results of all performance tests required by Specific Condition S6.a. and S6.b.

e. Proposed Test Plan:

1) A completed Proposed Test Plan must be submitted to the Air Pollution Control District, within thirty (30) days prior to the proposed test date so that the District may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. The Proposed Test Plan may serve the purpose of notification and must be approved prior to conducting the required emission testing.

2) A copy of a written report of the performance test results shall be submitted to the District within thirty (30) days of completion of any required testing, unless an extension is requested and approved by the District. The extension must be submitted in writing at least ten days prior to the thirty (30) day deadline. The report must include legible copies of raw data sheets, analytical instrument laboratory data and complete sample calculations from the required U.S. EPA Method for at least one sample run.

3) The test report is to fully account for all operational and emission parameters addressed both in the construction permit conditions as well as in any other applicable state or federal rules or regulations.

Plant-wide Applicability Limits Comments

1. The Plant-wide Applicability Limit(s) (PAL) are set at levels equal to the baseline determination submitted by Ford Motor Company February 2, 2009 and historical actual emission levels.

2. The PAL permit provisions (under Regulation 2.05 Prevention of Significant Deterioration of Air Quality) have been adopted by the Louisville Metro Air Pollution Control District (LMAPCD). "Baseline actual emissions" as of a particular date are generally defined as "rate of emissions, in tons per year, of a regulated NSR pollutant, that the unit actually emitted during any consecutive twenty-four (24) month period selected by the owner or operator within the ten (10) year period beginning on or after November 15, 1990, and immediately preceding the earlier of the date the owner or operator begins actual construction of the project or the date a complete permit application is received by the agency".

3. This action will allow department personnel to identify which source is not meeting regulatory requirements, if the situation occurs.

Louisville Assembly Plant, Ford Motor Company Maximum Achievable Control Technology (MACT) Requirements:

40 CFR 63 Subpart IIII – Surface Coating of Automobiles and Light Duty Trucks

S1. **Standards** (Regulation 2.16, section 4.1.1)

HAPs

a. The permittee shall choose to comply with one of the following HAPs limits:

i. **0.60 lbs HAPs/GACS on a calendar month basis**: E-Coat, guidecoat, topcoat, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations in the paint shop. (40 CFR 63.3091(a))

ii. **1.10 lbs HAPs/GACS on a calendar month basis**: guidecoat, topcoat, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations in the paint shop. (40 CFR 63.3091(b))

The permittee may choose to comply with the emission limit specified by S1.b. only if E-Coat meets either of the following requirements. (40 CFR 63.3092)

a. Each individual material added to E-Coat contains no more than 1.0 percent by weight of any organic HAP and no more than 0.10 percent by weight of any OSHA-defined carcinogenic organic HAP; or,
b. The emissions from all E-Coat bake ovens are captured and ducted to the oven thermal oxidizer which achieves a minimum destruction efficiency of at least 95 percent (by weight).

iii. **0.01 lbs HAPs per lb of coating on a calendar month basis** for sealers, deadeners and adhesive materials that are not components of glass bonding systems.

b. The permittee shall develop and implement a work practice plan to minimize the organic HAP emissions from the storage, mixing and conveying of coatings, thinners, and cleaning materials used in, and waste materials generated by, all coating operations for which an emission limit has been established above. The work practice plan must specify practices and procedures to ensure that, at a minimum, the following elements are implemented consistent with the

requirements of 40 CFR 63.3094. The permittee shall comply with the applicable work practice plans at all times. (40 CFR 63.3094)

i. All organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be stored in closed containers.
ii. Spills of organic-HAP containing coatings, thinners, cleaning materials, and waste materials must be minimized.
iii. Organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
iv. Mixing vessels, other than day tanks equipped with continuous agitation systems, which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
v. Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.
vi. Organic HAP emissions from cleaning and from purging of equipment associated with all coating operations subject to emission limits in S1.a and S1.b. above must be minimized by addressing:
    1) Vehicle body wipe pursuant to 40 CFR 63.3094(c)(1)(i);
    2) Coating line purging pursuant to 40 CFR 63.3094(c)(1)(ii);
    3) Coating system flushing pursuant to 40 CFR 63.3094(c)(1)(iii);
    4) Cleaning of spray booth grates pursuant to 40 CFR 63.3094(c)(1)(iv);
    5) Cleaning of spray booth walls pursuant to 40 CFR 63.3094(c)(1)(v);
    6) Cleaning of spray booth equipment pursuant to 40 CFR 63.3094(c)(1)(vi);
    7) Cleaning of external spray booth areas pursuant to 40 CFR 63.3094(c)(1)(vii);
    8) Additional housekeeping measures pursuant to 40 CFR 63.3094(c)(1)(viii).

    The permittee may choose to comply with an alternative to the work practice standard, after receiving prior approval from the US EPA in accordance with 40 CFR 63.6(g). (40 CFR 63.3100(c), 40 CFR 63.4493(b), and (c)), (40 CFR 63.094(d))

c. Revisions to the work practice plan likewise do not represent revisions to the facility's Renewable Operating Permit. Copies of the current work practice plan and any earlier plan developed within the past five years are required to be made available for inspection and copying by the LMAPCD upon request. (40 CFR 63.3094)(e)(f))

d. For any coating operation(s) for which HAP emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the

emission limits above, the permittee shall meet the operating limits specified in Table 1 of 40 CFR 63 Subpart IIII as identified below. The operating limits in Table 1 apply to the emission capture and add-on control systems on the coating operations. The permittee must establish the operating limits during the performance test according to the requirements in 40 CFR 63.3167. The operating limits shall be met at all times after they are established, except for periods of startup, shutdown and malfunction. (40 CFR 63.3093, 40 CFR 63.3100(b), (d) and Table 1)

Add-On Control Device	**Operating Limit**
Thermal Oxidizer	The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to 40 CFR 63.3167(a).
Concentrators, Including Zeolite Wheels and Rotary Carbon Adsorbers	The average desorption gas inlet temperature in any 3-hour period must not fall below the limit established according to 40 CFR 63.3167(e).

S2. **Monitoring** (Regulation 2.16, section 4.1.1)

a. For any coating operation(s) for which HAP emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, the permittee shall develop and implement a written startup, shutdown and malfunction plan (SSMP) in accordance with 40 CFR 63.6(e)(3) and submit to the District. This plan must address the startup, shutdown and corrective actions in the event of a malfunction of any emission capture system or add-on control device upon which compliance with any of the emission limits above depends. The SSMP must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures. (40 CFR 63.3100(f))

b. For any coating operation(s) for which HAP emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, the permittee shall operate and maintain all affected emission units including any emission capture system or add-on control device upon which compliance with any of the emission limits above. At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of

startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.3100(d))

c. For any coating operation(s) for which HAP emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, the permittee shall maintain a log detailing the operation and maintenance of any emission capture system, add-on control device, or continuous parameter monitor upon which compliance with any of the emission limits above depends. The log shall cover the period between the compliance date specified in 40 CFR 63.3083 and the date when the initial emission capture system and add-on control device performance tests have been completed, as specified in 40 CFR 63.3160. (40 CFR 63.3100(e))

S3. **Recordkeeping** (Regulation 2.16, section 4.1.1)

Records required in this section shall be maintained on file for a period of five years. (40 CFR 63.3131) The permittee shall maintain, at a minimum, the following records as of the applicable compliance date:

a. A copy of each notification and report that is submitted to comply with 40 CFR Part 63, Subpart IIII and the documentation supporting each notification and report as specified in 40 CFR 63.3130(a). (40 CFR 63.3130(a)).

b. A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP for each coating, thinner and cleaning material, the density for each coating and thinner, and the volume fraction of coating solids for each coating. (40 CFR 63.3130(b)).

c. Monthly records of the following:

i. For each coating or thinner used in E-Coat, guidecoat, topcoat, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, the volume used in each month, the mass fraction organic HAP content, the density, and the volume fraction of solids. (40 CFR 63.3130(c)(1))

ii. For each deadener material, and NGB Sealers and Adhesives used, the mass used in each month and the mass organic HAP content. (40 CFR 63.3130(c)(3))

iii. Calculations of the organic HAP emission rate for E-Coat, guidecoat, and topcoat in pounds per gallon of applied coating solids. If permittee chooses to comply with the option identified in 1.ii, a record of the weight fraction of each organic HAP in each material added to E-Coat. These calculations and records must include raw data, algorithms, and intermediate calculations. If the ‘‘Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,’’ EPA–450/3–88–018 (Docket ID No. OAR–2002 0093 and Docket ID No. A–2001–22), is used, all data input to this protocol must be recorded. If these data are maintained as electronic files, the electronic files, as well as any paper copies must be maintained. (40 CFR 63.3130(c)(4), 40 CFR 63.3163, 40 CFR 63.3173)

iv. Calculation of the average monthly mass organic HAP content in pounds per pound of coating, separately for deadener materials and NGB Sealers and Adhesives. (40 CFR 63.3130(c)(5), 40 CFR 63.3152)

v. The name, volume, mass fraction organic HAP content and density of each cleaning material used. (40 CFR 63.3130(6)(d) - (f))

d. Any additional records pertaining to deviations; startup, shutdown or malfunctions; emission capture systems; performance testing; capture and control efficiency determinations; transfer efficiency determinations; and work practice plans for any emission capture system or add-on control device upon which compliance with any of the emission limits in I.1 through 4 depends, pursuant to 40 CFR 63.3130(g) through (n). (40 CFR 63.3130(6)(g) – (n))

i. Records pertaining to the design and operation of control and monitoring systems for any emission capture system or add-on control device upon which compliance with any of the emission limits in SC I.1 through 4 depends must be maintained on-site for the life of the equipment in a location readily available to plant operators and inspectors. (40 CFR 63.3130(o)(6))

ii. The permittee shall compile all required records and complete all required calculations in a format acceptable to the Louisville Metro Air Pollution Control District and make them available by the end of the calendar month following each compliance period unless otherwise specified in any monitoring/recordkeeping condition.

iii. The permittee may rely upon the results of capture, destruction or transfer efficiency tests that have been previously conducted upon written approval from the District. Any such previous tests must meet the criteria identified in 40 CFR 63.3160(c)(1) through (3). (40 CFR 63.3160)

iv. The permittee shall install, operate and maintain each continuous parametric monitoring system in accordance with the applicable provisions of 40 CFR 63.3168. (40 CFR 63.3168)

v. The permittee shall demonstrate continuous compliance with the operating limits specified in Table 1 to Subpart IIII of Part 63 for any emission capture system or add-on control device upon which compliance with any of the emission limits in the above table depends, pursuant to 40 CFR 63.3163 and 40 CFR 63.3173 using the method(s) described below: (40 CFR 63.3163, 40 CFR 63.3173 and Table 1)

Add-On Control Device:	Operating Limit:	Continuous Compliance Demonstration Method
Thermal Oxidizer	The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to 40 CFR 63.3167(a).	a. Collect the combustion temperature data according to 40 CFR 63.3168(c); b. Reduce the data to 3-hour block averages; and c. Maintain the 3-hour average combustion temperature at or above temperature limit.
Concentrators, Including Zeolite Wheels and Rotary Carbon Adsorbers	The average desorption gas inlet temperature in any 3-hour period must not fall below the limit established according to 40 CFR 63.3167(e).	a. Collect the temperature data according to 40 CFR 63.3168(f); b. Reduce the data to 3-hour block averages; and c. Maintain the 3-hour average temperature at or above the temperature limit.

ix. For any coating operation(s) for which HAP emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, the permittee shall monitor or secure the valve or closure mechanism controlling each bypass line for each capture system upon which compliance with any of the emission limits in the table above depends in a non-bypass mode such that the valve or closure mechanism cannot be opened without creating a record that it was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the following: (40 CFR 63.3168(b)(1))

1. Flow control position indicator requirements pursuant to 40 CFR 63.3168(b)(1)(i);
2. Car-seal or lock-and-key valve closures requirements pursuant to 40 CFR 63.3168(b)(1)(ii);
3. Valve closure monitoring requirements pursuant to 40 CFR 63.3168(b)(1)(iii);

4. Automatic shutdown system requirements pursuant to 40 CFR 63.3168(b)(1)(iv).

If any bypass line is opened, a description of why the line was opened and the length of time it remained open must be included in the semi-annual compliance reports required in 40 CFR 63.3168(b)

S4. **Reporting** (Regulation 2.16, section 4.1.1)

a. The permittee shall submit applicable notifications specified in 40 CFR 63.7(b) and (c), 63.8(f)(4) and 63.9(b) through (e) and (h), as specified in 40 CFR 63.3110. (40 CFR Part 63, Subparts A and IIII)

b. For any emission capture system or add-on control device upon which compliance with any of the emission limits in the above table depends, for which a startup, shutdown, or malfunction occurs during the quarterly reporting period, the permittee shall submit a SSMP report as specified in 40 CFR 63.3120(c). (40 CFR 63. 3120(c), 40 CFR 63.10(d))

S5. **Testing** (Regulation 2.16, section 4.1.1)

a. The permittee shall perform the applicable performance tests and compliance demonstrations in accordance with 40 CFR 63.3150-3152, 40 CFR 63.3160-3161, 40 CFR 63.3163-3168, 40 CFR 63.3170-3171, and 40 CFR 63.3173. (40 CFR Part 63, Subpart IIII)

b. The permittee shall determine the mass fraction of each organic HAP for each material used according to the procedures established under 40 CFR 63.3151(a)(1) through (5). The permittee may use US EPA Method ALT-017 as an alternative for any material used, after demonstrating that its use as an alternative test methodology for that material, has been approved by the US EPA pursuant to the requirements of 40 CFR 63.3151(a)(3) and 40 CFR 63.7. (40 CFR 63.7, 40 CFR 63.3151)

c. For any emission capture system or add-on control device upon which compliance with any of the emission limits in the above table depends, the permittee shall submit all performance test reports for emission capture systems and add-on control devices, and reports of transfer efficiency tests as required by 40 CFR 63.3120(b). (40 CFR 63.3120(b))

40 CFR 63 Subpart EEEE – Organic Liquids Distribution Operations (OLD)

In the event that the permittee changes the materials in an existing affected storage tank that contains an organic liquid is equal to or greater than 5,000 gallons in such a way that the annual average true vapor pressure of the total organic hazardous air pollutant is above 4.0 psia, the permittee shall be subject to additional requirements pursuant to 40 CFR Part 63 Subpart EEEE and shall ensure compliance with those requirements. (40 CFR 63.2346)

a. For each existing affected storage tank that contains an organic liquid with a capacity of less than 5,000 gallons, records must be kept of the identity of the tank and the capacity of the tank (in gallons). Affected tanks are those tanks that contain organic liquid with a HAP content of 5 percent or greater by weight, as defined under 40 CFR §63.2406 and Table 1 of 40 CFR Part 63 Subpart EEEE. 63.2343(a)

b. For each existing affected storage tank that contains an organic liquid with a capacity of more than 5,000 gallons and contains an organic liquid with a HAP content of 5 percent or greater by weight, the following records must be kept:

   i. The identity of the tank and the capacity of the tank (in gallons),
   ii. The tank contents
   iii. The annual average true vapor pressure of the total organic hazardous air pollutant in the organic liquid (as defined under 40 CFR §63.2406 and Table 1 of 40 CFR Part 63 Subpart EEEE). (40 CFR 63.2343(b))

c. These records must be kept up-to-date and available for inspection. (40 CFR 63.2343)

d. All compliance records, notifications and reports, and any updates to those records, shall be retained for five years with two years of records on site. (40 CFR 63.2394(b) and (c))

OLD MACT Reporting Requirements

a. For each existing affected storage tank that has a capacity of more than 5,000 gallons, the permittee **must submit an Initial Compliance Report** that contains the following information (40 CFR 63.2343(b) and 63.2386):

   i. Company name and address.
   ii. Statement by a responsible official, including the official's name, title and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate and complete.
   iii. A listing of all existing affected storage tanks greater than 5,000 gallons that contain an organic liquid where the annual average true vapor pressure of the total organic hazardous air pollutant (as defined under Table 1 of 40 CFR Part 63 Subpart EEEE) is below 4.0 psia.

b. The permittee must submit a subsequent Compliance Report if any of the following occurs (40 CFR 63.2343(b)(2)(i)):

i. The permittee changes the materials in an existing affected storage tank that has a capacity equal to or greater than 5,000 gallons in such a way that the annual average true vapor pressure of the total organic hazardous air pollutant is above 4.0 psia.
ii. The permittee installs a new affected storage tank with a capacity equal to or greater than 5,000 gallons.
iii. There are changes to the information reported.

c. Each subsequent Compliance Report shall be submitted with the next Title V semi-annual report. (40 CFR 63.2386(e))

40 CFR 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

There are no applicable requirements or notification requirements under Subpart ZZZZ as all of the units are considered existing emergency generators less than 500 HP.

An existing emergency stationary RICE does not have to meet the requirements of this subpart and subpart A of this part. No initial notification is necessary. (40 CFR 64.6590(b)(3)

General Permit Reporting Requirements (Regulation 2.16, section 4.1.9.3)

The owner or operator shall report quarterly the following:

a. Emission Unit ID number and Control ID number;
b. The beginning and ending date of the reporting period;
c. Identification of the operating parameters being monitored;
d. Number, duration, and cause of all exceedances (or a negative declaration, if none); and
e. Description of the corrective action taken for each exceedance.

STAR Requirements:

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
5.01	General Provisions	1 through 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

a. The owner or operator shall submit with the notification of construction for any new emission unit the STAR EA Demonstration for all Category 1 through Category 4 TACs emitted from that emission unit.

b. The owner or operator shall submit a *plant-wide* emissions-based EA Demonstration to the District showing compliance with the *plant-wide* EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process when a change occurs that increases emissions above De minimus or previously modeled values.

c. If the TAC does not have an established BAC or De minimus value, the owner or operator shall calculate and report these values. The following form may be used for determining BAC and De minimus values:

http://www.louisvilleky.gov/NR/rdonlyres/121AAADA-9838-4057-ADFC-88CD95A14937/0/BAC_Worksheet.pdf

U002 - U004 Emission Unit Description: Five Boilers

U002 - U004 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
6.42	Reasonable Available Control Technology Requirements for Major Volatile Organic Compound	1.2, and 2 through 5
6.07	Standards of Performance for Existing Indirect Heat Exchangers	1 through 4
7.06	Standards of Performance for New Indirect Heat Exchangers	1 through 5
40 CFR 60 Subpart A	General Provisions	60.1 through 60.18
40 CFR 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	60.48c

District Only Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
7.02	Federal New Source Performance Standards Incorporated by Reference	1.23, 2 through 5

U002 - U004 Emission Points:

U002- U004 Equipment			
Emission Point	**Description**	**Applicable Regulation**	**Control ID**
E02A	One (1) powerhouse Wickes boiler; rated at 146 MM Btu/hr; installed in 1954; natural gas-fired with propane backup.	6.07	NA
		5.21	
		6.42	
E04A	One (1) Cleaver-Brooks dock boiler (No. 1); rated at 63.6 MM Btu/hr; installed in 1995; natural gas-fired with propane backup.	7.06	N/A
		5.21	
		6.42	
		40 CFR 60 Subpart Dc	
E04B	One (1) Cleaver-Brooks boiler (No. 2); 63.6 MM Btu/hr, installed 1995; natural gas-fired, with propane backup.	7.06	N/A
		5.21	
		6.42	
		40 CFR 60 Subpart DC	
E05	Two (2) hot water boilers; 33.5 MM Btu/hr, installed 1996; natural gas-fired	7.06	N/A
		5.21	
		40 CFR 60 Subpart DC	

U002 - U004 Control Devices: There are no control devices associated with Emission Unit U002 - U004.

U002 – U004 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **PM**

i. For Emission Point E02A:
The owner or operator shall not cause to be discharged into the atmosphere from that affected facility particulate matter in excess of 0.30 pounds per million BTU actual total heat input. (Regulation 6.07, section 4.1) (See Comment 1)

ii. For Emission Points E04A, E04B and E05:
The owner or operator shall not cause to be discharged into the atmosphere from that affected facility particulate matter in excess of 0.29 pounds per million BTU actual total heat input. (Regulation 7.06, section 4.1.4) (See Comment 1)

iii. See Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL)

b. **Opacity**

i. For indirect heat exchangers subject to Regulation 6.07 and 7.06, the owner or operator shall not allow or cause the particulate emissions into the open air from any indirect heat exchanger which is greater than twenty percent (20%) opacity except for:

ii. For indirect heat exchangers with a heat input capacity of less than 250 million BTU/hr, a maximum of 40% opacity shall be permissible for not more than two consecutive minutes in any 60 consecutive minutes;

iii. For indirect heat exchangers with heat input capacity of less than 250 million BTU/hr, a maximum of 40% opacity shall be permissible for not more than six consecutive minutes in any 60 consecutive minutes during cleaning the fire box or blowing soot; or

iv. For emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
(Regulation 7.06, section 4.2)

c. **SO_2**

i. The owner or operator shall not cause to be discharged into the atmosphere from that affected facility any gases which contain sulfur dioxide in excess of 0.99 pounds per million BTU actual total heat input for combustion of liquid and gaseous fuels. (Regulation 7.06, section 5.1.1) (See Comment 1)

ii. See Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL).

d. **NOx**

i. The owner or operator shall not allow or cause the *plant-wide* NOx emissions to exceed 99 tons during any consecutive 12-month period in order to stay below NOx RACT applicability thresholds. (Regulation 6.42)(See Comment 6)

ii. For Emission Points E04A, E04B and E05:
The owner or operator shall not allow or cause NOx emission to exceed 37 tons per boiler during March 1 through October 31.

iii. For Emission Point E02A:
No boiler shall have a monthly capacity factor greater than 10.0% for any month during the period March 1 to October 31. The term "monthly capacity factor" means the ratio between the actual heat input to a boiler from fuel combusted during a month and the potential heat input to a boiler form fuel combusted during a month and the potential heat input to the boiler had it been operated for 24 hours per day for the number of days in the month at the maximum steady state design heat input capacity.

e. **TAC**

The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels whether specifically established by modeling or derived from default de minimis levels. (Regulation 5.01, section 3.)

S2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. **PM**

For emission points E02A, E04A, E04B and E05, the owner or operator shall maintain records of monthly natural gas and/or other fuel usage.

b. **Opacity**

There are no monitoring requirements for Opacity compliance. (See Comment 2)

c. **SO_2**

40 CFR 60 Subpart DC monitoring requirements for SO_2 compliance. (See Comment 1)

i. The owner or operator shall keep records of the amount of fuel combusted during each month. (40 CFR 60.48c(g)(2))

ii. The owner or operator shall monthly calculate the prorated fuel usage of the boiler by correlating the design heat input capacity of all natural gas fired units at the plant if the individual fuel usage for each boiler is not known. (EPA Letter dated March 7, 2002) (See Comment 3)

d. **NOx**

Maintain records of monthly fuel usage, and use AP-42 emission factors and/or fuel analysis data, to calculate monthly emissions.

e. **TAC**

See Comment 4.

S3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **PM**

See Specific Condition S2.a.

b. **Opacity**

There are no record keeping requirements for Opacity compliance. (See Comment 2)

c. **SO_2**

See Specific Condition S2.c.

d. **NOx**

The owner or operator shall calculate and record the monthly and 12 consecutive month *plant-wide* NOx emissions for each month in the report period.

e. **TAC**

See Comment 4.

S4. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. **PM**

See PAL Reporting Requirements, there are no additional reporting requirements for demonstrating compliance with Regulation 6.07 and 7.06.

b. **Opacity**

There are no reporting requirements for Opacity compliance. (See Comment 2)

c. **SO_2**

See PAL Reporting Requirements, there are no additional reporting requirements for demonstrating compliance with Regulation 6.07 and 7.06.

d. **NOx**

See PAL Reporting Requirements.

e. **TAC**

See Comment 4.

S5. **Testing** (Regulation 2.16, section 4.1.9.3)

a. **PM**

There are no testing requirements for PM compliance.

b. **Opacity**

There are no testing requirements for Opacity compliance.

c. **SO_2**

There are no testing requirements for SO_2 compliance.

d. **NOx**

Within the initial 10-year term of the PAL permit, the owner or operator shall test at least once to establish an emission factor for emission points E04A and E04B.

e. **TAC**

There are no testing requirements for TAC compliance.

U002 - U004 Comments

1. The District has performed a one-time PM and SO_2 compliance demonstration for the boiler, using AP-42 emission factors and combusting natural gas, and the emission standards cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements for this boiler with respect to PM and SO_2 emission limits.

2. The District has determined that using a natural gas fired boiler will inherently meet the 20% opacity standard. Therefore, the company is not required to perform periodic monitoring to demonstrate compliance with the opacity standard.

3. The federal regulation 40 CFR 63, Subpart DDDDD was vacated on June 8, 2007, therefore the District has not included the boiler MACT requirements in this permit. The company has submitted the Part 1 and Part 2 of the 112j permit application for the vacated boiler MACT (40 CFR 63 Subpart DDDDD), dated on March 5, 2009 and May 8, 2009 respectively. The District is evaluating how to implement this requirement.

4. The TAC emissions from the combustion of natural gas are considered to be "de minimis emissions" by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas. (Regulation 5.01, section 1.6.7)

5. In a letter dated March 7, 2002 from EPA Region 4, EPA has identified certain types of alternative record keeping requirements for units that are regulated under 40 CFR 60 Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) that can be approved by the District without additional input from EPA.

6. This PAL permit supercedes construction permit #623-94-C and the plant-wide NOx limit is replacing the 39.9 tpy PSD/NSR NOx avoidance limit for the two (2) Cleaver-Brooks boilers (E04A and E04B).

7. Ford currently has a 146 MM Btu/hr boiler emission point E02A, however to keep 40 CFR 60, Subpart Db from being applicable, Ford can only install additional boilers totaling less than 100 MM Btu/hr.

U008 Emission Unit Description: Volatile Organic Liquid Storage Tanks

U008 Applicable Regulations:

Federally Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 2, 3, 4, 5
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	1 though 5; 7 and 8

District Only Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.18	Rule Effectiveness	1 through 3
5.01	General Provisions	1 through 4
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 66

U008 Emission Points:

U008 Emission Points				
ID	**Description**	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E08A	6000 gallon Methanol Tank	5.21	Submerged Fill	N/A
		7.12		
E08G	10,000 gallon UG Solvent Tank	5.21	Vapor Pressure < 1.5 psia	N/A
		7.12		
E08M	20,000 gallon Anti-Freeze Tank	5.21	Vapor Pressure < 1.5 psia	N/A
		7.12		
E08N	20,000 gallon Power Steering Fluid Tank	5.21	Vapor Pressure < 1.5 psia	N/A
		7.12		
E08O	6000 gallon Brake Fluid Tank	5.21	Vapor Pressure < 1.5 psia	N/A
		7.12		
E08P	20,000 gallon Diesel Fuel Tank	5.21	Vapor Pressure < 1.5 psia	N/A
		7.12		

U008 Control Devices: There are no control devices associated with Emission Unit U008.

U008 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **VOC**

i. See Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL).

ii. The owner or operator shall not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia, however if the vapor pressure of the VOC, as stored, is equal to or greater than 1.5 psi, as a minimum, it shall be equipped with a permanent submerged fill pipe. (Regulation 7.12, section 3)

b. **TAC**

The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels whether specifically established by modeling or derived from default de minimis levels. (Regulation 5.01, section 3.)

S2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. **VOC**

See Specific Condition S3.a.i.

b. **TAC**

See Specific Condition S3.b.

S3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

i. The owner or operator shall maintain records of the material stored in each storage vessel. If the contents of the storage vessels are changed, a record shall be made of the new contents, the new vapor pressure, and the date of the change in service.

ii. The owner or operator shall either maintain monthly records, including calculations, from either monthly usage records or ratioed annual emissions from the previous year that show the total VOC emissions during each calendar month and consecutive 12-month period for this emission unit.

b. **TAC**

The owner or operator shall keep a record of the Material Safety Data Sheet (MSDS) for each TAC-containing material in this emission unit.

S4. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. **VOC**

See General Permit Reporting Requirements.

b. **TAC**

The owner or operator shall submit a *plant-wide* emissions-based EA Demonstration to the District showing compliance with the *plant-wide* EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process when a change occurs that increases emissions above De minimus or previously modeled values.

U008 Comment

1. Emission points E08M, E08N and E08P are not subject to 40 CFR 60 subpart Kb because this subpart does not apply to storage vessels with a capacity greater than or equal to 151 m^3 (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) (0.51 psi) or with a capacity greater than or equal to 75 m^3 (19,813 gallons) but less than 151 m^3 (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 15.0 kPa (2.18 psi).

Emission Unit U009: Glass Installation

U009 Applicable Regulations :

Federally Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
7.59	Standards of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations	1 through 7
40 CFR 63 Subpart A	General Provisions	60.1 through 60.18
40 CFR 63 Subpart IIII	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	1, 2, 3, 4, 7, and 8

District Only Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.18	Rule Effectiveness	1 through 3
5.01	General Provisions	1 through 4
5.02	Adoption of National Emission Standards for Hazardous Air Pollutants	1, 3,4 and 5
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U009 Emission Points:

U009 Emission Points					
ID	**Description**	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**	**Stack ID**
E09A	Glass, Windshield, and Back Lights Installation	5.21	3.5 lb/gal, less water and exempt VOCs, as applied	N/A	S-400
		7.59			

U009 Control Devices: There are no control devices associated with Emission Unit U009.

U009 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **VOC**

i. The owner or operator shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of 0.42 kg of VOC/l (3.5 lb VOC/gal) of coating, excluding water and exempt solvents, as applied for extreme performance coatings. (Regulation 7.59, section 3.1.3)

ii. See Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL).

b. **TAC**

The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels whether specifically established by modeling or derived from default de minimis levels. (Regulation 5.01, section 3.)

c. **HAP**

See LAP MACT Standards Section.

S2. **Monitoring** (Regulation 2.16, section 4.1.9.1)

a. **VOC**

The owner or operator shall maintain the following monthly records to demonstrate ongoing compliance with the VOC content limit and with Regulation 1.05, section 4:

i. Calculations of VOC emissions from each facility based on the recorded parameters. Calculations of daily usage and VOC emissions from each facility based on the recorded parameters by prorating monthly net usage based on daily vehicle production.

ii. Determine daily usage of each material and VOC emissions by prorating monthly consumption based on daily vehicles produced.

b. **TAC**

See Specific Condition S3.b.

c. **HAP**

See LAP MACT Monitoring Section.

S3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

i. An owner or operator of an affected facility subject to this regulation shall maintain records that include, but not be limited to, the following: (Regulation 7.59, section 6.1)

1) The regulation and section number applicable to the affected facility for which the records are being maintained,

2) The application method and substrate type (metal, plastic, etc.),

3) The amount and type of coatings (including catalyst and reducer for multicomponent coatings) and solvent (including exempt compounds) used at each point of application during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month,

4) The VOC content as applied in each coating and solvent,

5) The date, or usage record period, for each application of coating and solvent,

6) The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month.

ii. The owner or operator shall maintain monthly records, including calculations, that show the total *plant-wide* VOC emissions during each calendar month and consecutive 12-month period.

iii. The owner or operator shall maintain a copy of the Material Safety Data Sheet (MSDS) for each VOC containing material used at this plant

b. **TAC**

The owner or operator shall keep a record of the Material Safety Data Sheet (MSDS) for each TAC-containing material in this emission unit.

c. **HAP**

See LAP MACT Recordkeeping Section.

S4. **Reporting** (Regulation 2.16, section. 4.1.9.3)

a. **VOC**

See General Permit Reporting Requirements.

b. **TAC**

The owner or operator shall submit a *plant-wide* emissions-based EA Demonstration to the District showing compliance with the *plant-wide* EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process when a change occurs that increases emissions above De minimus or previously modeled values.

c. **HAP**

See LAP MACT Reporting Requirements.

U010 Emission Unit Description: E-Coat Operation

U010 Applicable Regulations:

Federally Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
7.01	General Provisions	7.2
7.08	Standards of Performance for New Process Operations	1 through 3
40 CFR 60 Subpart A	General Provisions	60.1 through 60.18
40 CFR 60 Subpart MM	National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations	60.390 through 60.397
40 CFR 63 Subpart A	General Provisions	63.1 through 63.16
40 CFR 63 Subpart IIII	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	1, 2, 3 ,4, 7 and 8

District Only Enforceable Regulations		
Regulation	**Subject**	**Applicable Sections**
1.18	Rule Effectiveness	1 through 3
5.01	General Provisions	1 through 4
5.02	Adoption of National Emission Standards for Hazardous Air Pollutants	1, 3, 4 and 5
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
7.02	Federal New Source Performance Standards Incorporated by Reference	1.50, 2 , 3, 4 and 5

U010 Emission Points:

U010 Emission Points				
ID	**Description**	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E10A	E-Coat Dip Tank	40 CFR 60 Subpart MM	(R_T) is ≥ 0.16, not exceed 1.4 lbs/gal (0.17 kg/l) R_T is ≥ 0.04 and < 0.16, not exceed the weight per gallon limit calculated as follows: $0.17 \times 350^{(0.160 - R_T)}$ kg of VOC per liter of applied coating solids R_T is < 0.040, not be subject to an emission limit	N/A
		6.17 and 7.01		
		40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) E-coat)	
E10B	E-Coat Oven	40 CFR 60 Subpart MM	See Specific Condition S1.a	C10A
		6.17 and 7.01		
		40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) E-coat)	
		7.08	< 300 ppm	

U010 Emission Points				
ID	**Description**	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E10C	E-Coat Oven (3rd Pass)	40 CFR 60 Subpart MM	See Specific Condition S1.a	C10B
		6.17 and 7.01		
		40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) E-coat)	
		7.08	< 300 ppm	
E10D	E-Coat Dump Metal AST	40 CFR 60 Subpart MM	See Specific Condition S1.a	N/A
		6.17 and 7.01		
		40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) E-coat)	
E17A	E-Coat Scuff Booth	7.08	< 20%	C17A
			2.34 lb/hr	

U010 Control Devices:

ID	Description	Performance Indicator	Stack ID
C10A	One (1) Regenerative Thermal Oxidizer (RTO)	Temperature	S-041, S-043, S-045
C10B	One (1) Regenerative Thermal Oxidizer (RTO)	Temperature	S-020 to S-022, S-050
C17A	Dry Panel Filter	N/A	S-047, S-048

U010 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **VOC**

i. The owner or operator shall be subject to the following emission limits (40 CFR 60.392, Regulation 7.01 section 7.2 and Regulation 6.17, section 3):

1) When the solids turnover ratio (R_T) is ≥ 0.16, not exceed 1.4 lbs/gal (0.17 kg/l) of applied coating solids.

2) When the R_T is ≥ 0.04 and < 0.16, not exceed the weight per gallon limit calculated as follows:

$0.17 \times 350^{(0.160 - R_T)}$ kg of VOC per liter of applied coating solids.

3) When the R_T is < 0.040, not be subject to an emission limit established pursuant to this regulation.

ii. See Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL).

b. **PM**

i. See Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL).

ii. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2) (See Comment 1)

iii. The owner or operator shall not operate the scuff booth unless the particulate filters are installed and operating properly. The owner or operator shall follow good operating practices for the particulate filters.

c. **Opacity**

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

d. **HAP**

See LAP Ford Motor Company MACT Standards Section.

e. **NOx**

The owner or operator shall not cause to be discharged into the atmosphere from

any affected facility or from any air pollution control equipment installed on any affected facility any NO_x fumes in excess of 300 ppm by volume expressed as NO_2. (Regulation 7.08, section 4) (See Comment 2)

f. **TAC**

i. The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels whether specifically established by modeling or derived from default de minimis levels. (Regulation 5.01, section 3.)

ii. The owner or operator shall utilize the control devices at all times the surface coating operations are in operation and shall, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (Regulation 5.21, section 4.7)

S2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. **VOC**

i. Monitor ongoing compliance by calculating monthly, the daily volume-weighted average VOC content of the coatings (including resin, pigment, and flow control additive) used. Procedures used for this determination may be those provided in the "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22).

ii. The owner or operator shall during operation of any coating operation(s) for which emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, maintain the afterburners combustion chamber temperature at ≥ 760° C or other temperature, as determined during the latest stack test, based upon a three hour average, and maintain a combustion chamber temperature of no more than 28°C (50^oF) below the average combustion temperature. In addition, the afterburners shall have a minimum residence time of 0.5 seconds. The temperature shall be recorded using a recorder, which shall be calibrated and maintained according to the manufacturer's specifications. Temperature measurements of the thermal oxidizer combustion chamber shall be made at least once every 15 minutes and recorded during operation of the associated coating operations.

iii. If necessary for purposes of compliance, this line shall not be operated unless all control devices are being properly operated.

iv. Use EPA Method 24 to determine the amount of VOC in the coating. The following equation may be used as an alternate method to demonstrate compliance:

$$VOC_w = \sum_{i=1}^{n} \frac{V_i C_i}{V_t}$$

Where:

VOC_W = the weighted average coating VOC content, as applied; and less water and exempt solvents, expressed in pounds of VOC per gallon of coating.

n = number of different coatings used on a coating line a given month.

V_1 = the volume of each coating used on a coating line, as applied and less water and exempt solvents, a given month.

C_1 = the VOC content of each coating used on a coating line, as applied and less water and exempt solvents, a given month.

V_t = total volume of all coatings applied each month on a coating line, less water and exempt solvents.

v. Meet the standards specified in 40 CFR 60.392, as calculated using the prescribed transfer efficiency of 40 CFR 60.393(c)(1)(i)(C) for the monthly weighted average mass of VOC emitted per volume of applied coating solids.

b. **PM**

The owner or operator shall include monthly inspection routine maintenance as recommended by the manufacturer, and prompt repair of any defects.

c. **Opacity**

See Specific Condition S2.b.

d. **HAP**

See LAP Ford Motor Company MACT Monitoring Section.

e. **NO_x**

There are no monitoring requirements for NO_x compliance. (See Comment 2)

f. **TAC**

i. See Specific Condition S2.a.ii and iii.

ii. See Specific Condition S3.f.

S3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

Perform record keeping for VOCs for 40 CFR 60.395 and 1.05, Section 4:

i. Record monthly the quantity of resin, pigment, and flow control additive added to the electrocoat system.

ii. Determine and record monthly usage of each material.

iii. Calculations shall incorporate control efficiency where being relied upon for compliance purposes and shall include downtime adjustments to account for increased emissions during the period the afterburners were not operating. If used for compliance, the owner or operator shall also maintain records of control device downtimes and bypasses, including the date and duration of each occurrence.

iv. The owner or operator shall continuously record the incinerator combustion temperature during coating operations for thermal incineration or the gas temperature upstream and downstream of the incinerator catalyst bed during coating operations for catalytic incineration.

v. The owner or operator shall maintain monthly records, including calculations that show the total *plant-wide* VOC emissions during each calendar month and consecutive 12-month period.

vi. Record the afterburner combustion chamber temperature and temperature recording frequency from Specific Condition S2.a.ii.

b. **PM**

i. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.

ii. Proper operation of the fabric filter shall be ensured by maintaining records of inspections and routine maintenance activities and shall make these records available to the District upon request. A demonstration that

proper operation of the fabric filter has occurred satisfies this compliance requirement for the standard specified in S1.b.ii. above.

c. **Opacity**

See Specific Condition S3.b.

d. **HAP**

See LAP Ford Motor Company MACT Recordkeeping Section.

e. **NO_x**

There are no record keeping requirements for NO_x compliance. (See Comment 2)

f. **TAC**

i. The owner or operator shall keep a record of the Material Safety Data Sheet (MSDS) for each TAC-containing material in this emission unit.

ii. The owner or operator shall maintain records that identify all periods of bypassing the control devices while the surface coating operations are in operation for a given day. The records shall include the date, duration (including start and stop time) of each bypass event, identification of the control device and process equipment in operation, and the total lb/hr emissions of each TAC from each piece of equipment during each bypass event, if that control equipment is required to meet the EA goals. (See Comment 3)

iii. See Specific Conditions S3.a.iii.

S4. **Reporting** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

i. See General Permit Reporting Requirements.

ii. For the control devices, the owner or operator shall clearly identify all deviations from permit requirements. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration including the following information:

1) Emission Unit number and Control ID number;
2) The beginning and ending date of the reporting period;
3) Identification of the operating parameters being monitored;
4) Number, duration, and cause of all exceedances of the parameters;

and

5) Description of the corrective action taken for each exceedance.

iii. Perform reporting for VOCs for 40 CFR 60.395 and 1.05, Section 4:

1) The owner or operator shall report the volume weighted average mass of VOC per volume of applied coating solids for each affected facility.
2) For thermal incinerators, every three-hour period shall be reported during which the average temperature measured is more than 28 °C less than the average temperature during the most recent control device performance test.
3) For catalytic incinerators, every three-hour period shall be reported during which the average temperature immediately before the catalyst bed, when the coating system is operational, is more than 28 °C less than the average temperature immediately before the catalyst bed during the most recent control device performance test at which destruction efficiency was determined. In addition, every three-hour period shall be reported each quarter during which the average temperature difference across the catalyst bed when the coating system is operational is less than 80 percent of the average temperature difference of the device during the most recent control device performance test at which destruction efficiency was determined.
4) For thermal and catalytic incinerators, if no such periods occur, the owner or operator shall submit a negative report.
5) The owner or operator shall notify the Administrator 30 days in advance of any test by Method 25.

b. **PM**

Any deviation from the requirement to perform monthly visible inspections of the scuff booth PM filter system.

c. **Opacity**

See Specific Condition S4.b.

d. **HAP**

See LAP Ford Motor Company MACT Reporting Requirements.

e. **NO_x**

There are no reporting requirements for NO_x compliance. (See Comment 2)

f. **TAC**

i. The owner or operator shall submit a *plant-wide* emissions-based EA Demonstration to the District showing compliance with the *plant-wide* EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process when a change occurs that increases emissions above De minimus or previously modeled values.

ii. Identification of all periods of bypassing the control devices while the surface coating operations were in operation during a reporting period. The report shall include the date, duration (including start and stop time) of each bypass event, and the total lb/hr emissions of each TAC from each piece of equipment during each bypass event, if that control equipment is required to meet the EA goals. (See Comment 3)

iii. See Specific Conditions S4.a.ii.

U010 Comments

1. Compliance with this requirement is demonstrated through a mass balance approach or engineering estimate.

2. The District has performed a one-time NO_x compliance demonstration using AP-42 emission factors and combusting natural gas, and the emission standard cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

3. The reported total lb/hr emissions of each TAC from each piece of equipment during each bypass event will be used to determine if each TAC claimed as de minimis pursuant to Regulation 5.01 Section 1.6 in Ford Motor Company Louisville Assembly Plant's current plant-wide emissions-based EA demonstration continue to meet the de minimis criteria specified in Section 1.6.4. Should emissions during a bypass event for a TAC claimed to be de minimis exceed the de minimis criteria, Ford Motor Company Louisville Assembly Plant shall submit an updated plant-wide emission-based EA Demonstration to the District showing compliance with the plant-wide EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process where the TAC emissions increase above de minimis values.

U011 Emission Unit Description: Guidecoat Operation

U011 Applicable Regulations:

Federally Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
7.01	General Provisions	7.2
7.08	Standards of Performance for New Process Operations	1 through 3
7.59	Standards of Performance for New Miscellaneous Metal Parts Products Surface Coating Operation	1 through 7
40 CFR 60 Subpart A	General Provisions	60.1 through 60.18
40 CFR 60 Subpart MM	National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations	60.390 through 60.397
40 CFR 63 Subpart A	General Provisions	63.1 through 63.16
40 CFR 63 Subpart IIII	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	1, 2, 3 ,4, 7 and 8

District Only Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.18	Rule Effectiveness	1 through 3
5.01	General Provisions	1 through 4
5.02	Adoption of National Emission Standards for Hazardous Air Pollutants	1, 3, 4 and 5
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
7.02	Federal New Source Performance Standards Incorporated by Reference	1.50, 2 , 3, 4 and 5

U011 Emission Points:

U011 Emission Points				
ID	**Description**	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E11A	Guidecoat Paint Spray Booth and Air Supply House	40 CFR 60 Subpart MM	See Specific Condition S1.a	C11A
		6.17 and 7.01		
		40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) Guidecoat)	
E11B	Touchup and Blackout Booth	7.08	< 20%	C10B
			2.34 lb/hr	
		7.59	3.5 lbs VOC/gal	
E11C	Guidecoat Oven (1st and 2nd Pass)	40 CFR 60 Subpart MM	See Specific Condition S1.a	C11C
		6.17 and 7.01		
		40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) Guidecoat)	
		7.08	< 300 ppm	

U011 Emission Points				
ID	**Description**	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E11D	Guidecoat Oven (3rd Pass)	40 CFR 60 Subpart MM	See Specific Condition S1.a	C10B
		6.17 and 7.01		
		40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) Guidecoat)	
		7.08	< 300 ppm	
E11E / E12G	Guidecoat/Topcoat Paint Kitchen	1.05	Same as for 7.59	N/A
		40 CFR 60.3092	See Specific Condition S1.a	
E18A	Guidecoat (Prime) Scuff Booth	7.08	< 20%	C18A
			2.34 lb/hr	

U011 Control Devices:

U011 Control Devices			
ID	**Description**	**Performance Indicator**	**Stack ID**
C11A	Water Wash	N/A	S-080 to S090
C10B	One (1) Regenerative Thermal Oxidizer (RTO)	Temperature	S-179 to S182 and S-098, S099, S050
C11C	One (1) Regenerative Thermal Oxidizer (RTO)	Temperature	S-091 to S-092, S-097
C18A	Dry Panel Filter	N/A	S-175 to S-178

U011 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **VOC**

i. The owner or operator shall be subject to the limit of 1.40 kg VOC/l (11.7 lb VOC/gal) of applied coating solids, less water and exempt solvents. (40 CFR 60.392)

ii. The owner or operator shall be subject to the limit of 1.8 kg VOC/l (15.1 lb VOC/gal) of applied coating solids, less water and exempt solvents. (Regulation 7.01 section 7.2 and Regulation 6.17, section 3.2) (See Comment 3)

iii. For Emission Point E11B, the owner or operator shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of 0.42 kg of VOC/l (3.5 lb of VOC/gal) of coating, excluding water and exempt solvents, as applied for extreme performance coatings. (Regulation 7.59, section 3.1.3)

iv. See Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL).

b. **PM**

i. See Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL).

ii. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2) (See Comment 1)

iii. The owner or operator shall not operate the scuff booth unless the particulate filters are installed and operating properly. The owner or operator shall follow good operating practices for the particulate filters.

c. **Opacity**

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

d. **HAP**

See LAP Ford Motor Company MACT Standards Section.

e. **NOx**

The owner or operator shall not cause to be discharged into the atmosphere from any affected facility or from any air pollution control equipment installed on any affected facility any NO_x fumes in excess of 300 ppm by volume expressed as NO_2. (Regulation 7.08, section 4) (See Comment 2)

f. **TAC**

i. The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels whether specifically established by modeling or derived from default de minimis levels. (Regulation 5.01, section 3.)

ii. The owner or operator shall utilize the control devices at all times the surface coating operations are in operation and shall, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (Regulation 5.21, section 4.7)

S2. **Monitoring** (Regulation 2.16, section 4.1.9.1)

a. **VOC**

i. For Emission Point E11B, record monthly usage. Determine daily usage of each material by prorating monthly consumption based on daily vehicles produced. Record the amount of surface preparation, clean up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period. (Regulation 7.59, section 3.1.4 and 6.1.6, and 2.16, section 4.1.9.1.2)

ii. The owner or operator shall during operation of any coating operation(s) for which emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, maintain the afterburners combustion chamber temperature at ≥ 760° C or other temperature, as determined during the latest stack test, based upon a three hour average, and maintain a combustion chamber temperature of no more than 28°C (50^oF) below the average combustion temperature. In addition, the afterburners shall have a minimum residence time of 0.5 seconds. The temperature shall be recorded using a recorder, which shall be calibrated and maintained according to the manufacturer's specifications. Temperature measurements of the thermal oxidizer combustion chamber shall be made at least once every 15 minutes and recorded during operation of the associated coating operations.

iii. The line shall not be operated unless all control devices are being properly operated.

iv. Measure capture efficiency pursuant to Regulation 1.05, Section 3, except that EPA Method 204F, Volatile Organic Compounds Content in Liquid Input Stream (Distillation Approach), shall be used to determine VOC input.

v. Use EPA Method 24 to determine the amount of VOC in the coating. The following equation may be used as an alternate method to demonstrate compliance:

$$VOC_W = \frac{\sum_{i=1}^{n} V_i C_i}{\sum_{i=1}^{n} V_i}$$

Where:

VOC_W = the daily weighted average coating VOC content, as applied; and less water and exempt solvents, expressed in pounds of VOC per gallon of coating.

n = number of different coatings used on a coating line a given day.

V_1 = the volume of each coating used on a coating line, as applied and less water and exempt solvents, a given day.

C_1 = the VOC content of each coating used on a coating line, as applied and less water and exempt solvents, a given day.

V_t = total volume of all coatings applied each day on a coating line, less water and exempt solvents.

b. **PM**

The owner or operator shall include monthly inspection routine maintenance as recommended by the manufacturer, and prompt repair of any defects.

c. **Opacity**

See Specific Condition S2.b.

d. **HAP**

See LAP Ford Motor Company MACT Monitoring Section.

e. **NO_x**

There are no monitoring requirements for NO_x compliance. (See Comment 2)

f. **TAC**

i. See Specific Condition S2.a.iii and iv.

ii. See Specific Condition S3.f.

S3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

i. For Emission Point E11B, the owner or operator of an affected facility subject to this regulation shall maintain records that include, but not be limited to, the following: (Regulation 7.59, section 6.1)

1) The regulation and section number applicable to the affected facility for which the records are being maintained,

2) The application method and substrate type (metal, plastic, etc.),

3) The amount and type of coatings (including catalyst and reducer for multi-component coatings) and solvent (including exempt compounds) used at each point of application during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month,

4) The VOC content as applied in each coating and solvent,

5) The date, or usage record period, for each application of coating and solvent,

6) The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month.

ii. The owner or operator shall maintain the following records: (40 CFR 60.395 and 1.05, Section 4)

1) Record daily the quantity of paint and dilution solvent added to the

guidecoat (primer surfacer).

2) The owner or operator shall monitor ongoing compliance by calculating monthly, a daily volume-weighted average of the coatings used.

3) Combine daily pour records with monthly tank level readings to determine monthly paint usage.

4) Determine daily paint usage of each material by prorating consumption based on daily surface area coated.

5) Determine daily usage and emissions by using calculation procedures in Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light Truck Topcoat Operations, EPA-450/3-88-018.

6) Calculations shall incorporate control efficiency and shall include downtime adjustments to account for increased emissions during the period the afterburners were not operating. The owner or operator shall also maintain records of control devices downtimes and bypasses, including the date and duration of each occurrence.

7) Report all instances of non-compliance to the District no later than (15) days after the occurrence has been confirmed, notwithstanding Regulation 1.07.

8) Meet the standards specified in 40 CFR 60.392, as calculated, using the prescribed transfer efficiency of 40 CFR 60.393 (c)(1)(i)(C) for the monthly weighted average mass of VOC emitted per volume of applied coating solids.

iii. Record the temperature and frequency from Specific Condition S2.a.ii.

b. **PM**

i. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.

ii. Proper operation of the fabric filter shall be ensured by maintaining records of inspections and routine maintenance activities and shall make these records available to the District upon request. A demonstration that proper operation of the fabric filter has occurred satisfies this compliance requirement for the standard specified in S1.b.ii. above.

c. **Opacity**

See Specific Condition S3.b.

d. **HAP**

See LAP Ford Motor Company MACT Recordkeeping Section.

e. **NO_x**

There are no record keeping requirements for NO_x compliance. (See Comment 2)

f. **TAC**

i. The owner or operator shall keep a record of the Material Safety Data Sheet (MSDS) for each TAC-containing material in this emission unit.

ii. The owner or operator shall maintain records that identify all periods of bypassing the control devices while the surface coating operations are in operation for a given day. The records shall include the date, duration (including start and stop time) of each bypass event, identification of the control device and process equipment in operation, and the total lb/hr emissions of each TAC from each piece of equipment during each bypass event, if that control equipment is required to meet the EA goals. (See Comment 4)

iii. See Specific Conditions S3.a.ii.(5)

S4. **Reporting** (Regulation 2.16, section. 4.1.9.3)

a. **VOC**

i. See General Permit Reporting Requirements.

ii. For the control devices, the owner or operator shall clearly identify all deviations from permit requirements. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for the following category:

1) Emission Unit number and Control ID number;
2) The beginning and ending date of the reporting period;
3) Identification of the operating parameters being monitored;
4) Number, duration, and cause of all exceedances of the parameters; and
5) Description of the corrective action taken for each exceedance.

iii. Perform record keeping for VOCs for 40 CFR 60.395 and 1.05, Section 4:

1) The owner or operator shall report the volume weighted average mass of VOC per volume of applied coating solids for each affected facility.
2) The owner or operator shall continuously record the incinerator combustion temperature during coating operations for thermal incineration or the gas temperature upstream and downstream of the incinerator catalyst bed during coating operations for catalytic incineration.
3) For thermal incinerators, every three-hour period shall be reported during which the average temperature measured is more than 28 °C less than the average temperature during the most recent control device performance test.
4) For catalytic incinerators, every three-hour period shall be reported during which the average temperature immediately before the catalyst bed, when the coating system is operational, is more than 28 °C less than the average temperature immediately before the catalyst bed during the most recent control device performance test at which destruction efficiency was determined. In addition, every three-hour period shall be reported each quarter during which the average temperature difference across the catalyst bed when the coating system is operational is less than 80 percent of the average temperature difference of the device during the most recent control device performance test at which destruction efficiency was determined.
5) For thermal and catalytic incinerators, if no such periods occur, the owner or operator shall submit a negative report.
6) The owner or operator shall notify the Administrator 30 days in advance of any test by Method 25.

b. **PM**

Any deviation from the requirement to perform monthly visible inspections of the scuff booth PM filter system.

c. **Opacity**

See Specific Condition S4.b.

d. **HAP**

See LAP Ford Motor Company MACT Reporting Requirements.

e. **NO_x**

There are no reporting requirements for NO_x compliance. (See Comment 2)

f. **TAC**

i. The owner or operator shall submit a *plant-wide* emissions-based EA Demonstration to the District showing compliance with the *plant-wide* EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process when a change occurs that increases emissions above De minimus or previously modeled values.

ii. Identification of all periods of bypassing the control devices while the surface coating operations were in operation during a reporting period. The report shall include the date, duration (including start and stop time) of each bypass event, and the total lb/hr emissions of each TAC from each piece of equipment during each bypass event, if that control equipment is required to meet the EA goals. (See Comment 4)

iii. See Specific Conditions S4.a.ii.

U011 Comments

1. Compliance with this requirement is demonstrated through a mass balance approach or engineering estimate.

2. The District has performed a one-time NO_x compliance demonstration using AP-42 emission factors and combusting natural gas, and the emission standard cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

3. If Ford is in compliance with the 40 CFR 60 Subpart MM 60.3092 VOC limit than they are in compliance with Regulation 6.17, section 3.3 VOC limit.

4. The reported total lb/hr emissions of each TAC from each piece of equipment during each bypass event will be used to determine if each TAC claimed as de minimis pursuant to Regulation 5.01 Section 1.6 in Ford Motor Company Louisville Assembly Plant's current plant-wide emissions-based EA demonstration continue to meet the de minimis criteria specified in Section 1.6.4. Should emissions during a bypass event for a TAC claimed to be de minimis exceed the de minimis criteria, Ford Motor Company Louisville Assembly Plant shall submit an updated plant-wide emission-based EA Demonstration to the District showing compliance with the plant-wide EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process where the TAC emissions increase above de minimis values.

U012 Emission Unit Description: Topcoat Operation

U012 Applicable Regulations:

Federally Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
7.08	Standards of Performance for New Process Operations	1 through 3
7.01	General Provisions	7.2
40 CFR 60 Subpart A	General Provisions	60.1 through 60.18
40 CFR 60 Subpart MM	National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations	60.390 through 60.397
40 CFR 63 Subpart A	General Provisions	63.1 through 63.16
40 CFR 63 Subpart IIII	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	1, 2, 3 ,4, 7 and 8

District Only Enforceable Regulations		
Regulation	**Subject**	**Applicable Sections**
1.18	Rule Effectiveness	1 through 3
5.01	General Provisions	1 through 4
5.02	Adoption of National Emission Standards for Hazardous Air Pollutants	1, 3, 4 and 5
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
7.02	Federal New Source Performance Standards Incorporated by Reference	1.50, 2 , 3, 4 and 5

U012 Emission Points:

U012 Emission Points			
Description	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E12A North Main Enamel Booth and Air Supply	40 CFR 60 Subpart MM	See Specific Condition S1.a.	C12A, C12B C12C, C12H and C12G
	6.17 and 7.01		
	7.08	< 20%	
		2.34 lb/hr	
	40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) Topcoat)	
E12B North Main Enamel Oven	40 CFR 60 Subpart MM	See Specific Condition S1.a.	C12D
	6.17 and 7.01		
	7.08	< 20%	
		< 300 ppm	
	40 CFR 63 Subpart IIII	c. 0.6 lbs HAP/GACS Or d. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) Topcoat)	

U012 Emission Points			
Description	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E12C South Main Enamel Booth and Air Supply House	40 CFR 60 Subpart MM	See Specific Condition S1.a.	C12C, C12E, C12H and C12G
	6.17 and 7.01		
	7.08	< 20%	
		2.34 lb/hr	
	40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) Topcoat)	
E12D South Main Enamel Oven	40 CFR 60 Subpart MM	See Specific Condition S1.a.	C12D
	6.17 and 7.01		
	7.08	< 20%	
		< 300 ppm	
	40 CFR 63 Subpart IIII	c. 0.6 lbs HAP/GACS Or d. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) Topcoat)	

U012 Emission Points			
Description	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E12E TuTone/Repair Topcoat Booth and Air Supply House	40 CFR 60 Subpart MM	See Specific Condition S1.a.	C12F
	6.17 and 7.01		
	7.08	< 20%	
		2.34 lb/hr	
	40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) Topcoat)	
E12F Tutone/Repair Topcoat Oven	40 CFR 60 Subpart MM	See Specific Condition S1.a.	C12D
	6.17 and 7.01		
	7.08	< 20%	
		< 300 ppm	
	40 CFR 63 Subpart IIII	c. 0.6 lbs HAP/GACS Or d. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) Topcoat)	

U012 Emission Points			
Description	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E11E/E12G Guidecoat/Topcoat Kitchen	40 CFR 60 Subpart MM	See Specific Condition S1.a.	N/A
	6.17 and 7.01		
	40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) Topcoat)	
E12H Topcoat Scuff Booth	7.08	< 20%	C19A
		2.34 lb/hr	
E12I TuTone/Repair Scuff Booth	7.08	< 20%	C20A
		2.34 lb/hr	

U12 Control Devices:

ID	Description	Performance Indicator	Stack ID
C12A, C12B C12C, C12H and C12G	Water Wash, two (2) Carbon Adsorber and two (2) Regenerative Thermal Oxidizer (RTO)	Temperature	S- to S090
C12C, C12E, C12H and C12G	Two (2) Regenerative Thermal Oxidizer (RTO) ,Water Wash and Carbon Adsorber	Temperature	S-150 to S-174, S-193, S-194 and S-203
C12D	Regenerative Thermal Oxidizer (RTO)	Temperature	S-404, S-408, S-409 and S-215
C12F	Water Wash	N/A	S-110 to S124 and S-410
C19A	Dry Panel Filter	N/A	S-183 and S-184
C20A	Dry Panel Filter	N/A	S-185 and S-186

U012 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **VOC**

i. The owner or operator shall be subject to the limit of 1.47 kg VOC/l (12.3 lb VOC/gal) of applied coating solids, less water and exempt solvents. (40 CFR 60.392) (See Comment 3)

ii. The owner or operator shall be subject to the limit of 11.3 lb VOC/gal of applied coating solids, less water and exempt solvents. (Regulation 7.01 section 7.2 and Regulation 6.17, section 3.3)

iii. See Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL).

b. **PM**

i. See Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL).

ii. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2) (See Comment 1)

iii. The owner or operator shall not operate the booths unless the particulate filters are installed and operating properly.

c. **Opacity**

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

d. **HAP**

See LAP Ford Motor Company MACT Standards Section.

e. **NOx**

The owner or operator shall not cause to be discharged into the atmosphere from any affected facility or from any air pollution control equipment installed on any affected facility any NO_x fumes in excess of 300 ppm by volume expressed as NO_2. (Regulation 7.08, section 4) (See Comment 2)

f. **TAC**

i. The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels whether specifically established by modeling or derived from default de minimis levels. (Regulation 5.01, section 3.)

ii. The owner or operator shall utilize the control devices at all times the surface coating operations are in operation if the control device reductions were used to demonstrate compliance and shall, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (Regulation 5.21, section 4.7)

S2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. **VOC**

i. Monitor ongoing compliance by calculating monthly, a daily volume-weighted average of the coatings used. Procedures used for this determination shall be those of "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22).

ii. The owner or operator shall during operation of any coating operation(s) for which emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, maintain the afterburners combustion chamber temperature at ≥ 760° C or other temperature, as determined during the latest stack test, based upon a three hour average, and maintain a combustion chamber temperature of no more than 28°C (50^{o}F) below the average combustion temperature. In addition, the afterburners shall have a minimum residence time of 0.5 seconds. The temperature shall be recorded using a recorder, which shall be calibrated and maintained according to the manufacturer's specifications. Temperature measurements of the thermal oxidizer combustion chamber shall be made at least once every 15 minutes and recorded during operation of the associated coating operations.

iii. If necessary for purposes of compliance, this line shall not be operated unless all control devices are being properly operated.

iv. Use EPA Method 24 to determine the amount of VOC in the Coating. The following equation may be used as an alternate method to demonstrate compliance:

$$VOC_w = \sum_{i=1}^{n} \frac{V_i C_i}{V_t}$$

Where:

VOC_W = the daily weighted average coating VOC content, as applied; and less water and exempt solvents, expressed in pounds of VOC per gallon of coating.

n = number of different coatings used on a coating line a given day.

V_1 = the volume of each coating used on a coating line, as applied and less water and exempt solvents, a given day.

C_1 = the VOC content of each coating used on a coating line, as applied and less water and exempt solvents, a given day.

V_t = total volume of all coatings applied each day on a coating line, less water and exempt solvents.

v. Meet the standards specified in 40 CFR 60.392, as calculated, using the prescribed transfer efficiency of 40 CFR 60.393(c)(1)(i)(C) for the monthly weighted average mass of VOC emitted per volume of applied coating solids.

b. **PM**

The owner or operator shall follow good operating practices for the particulate filers, including monthly inspection, routine maintenance as recommended by the manufacturer, and prompt repair of any defects.

c. **Opacity**

See Specific Condition S2.b.

d. **HAP**

See LAP Ford Motor Company MACT Monitoring Section.

e. **NO_x**

There are no monitoring requirements for NO_x compliance. (See Comment 2)

f. **TAC**

i. See Specific Condition S2.a.ii and iii.

ii. See Specific Condition S3.f.

S3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

i. The owner or operator shall maintain the following records: (40 CFR 60.395 and 1.05, Section 4)

1) Record daily the quantity and type of paint withdrawn from the topcoat paint circulation system for use in the final repair operation.

2) Determine daily VOC emissions based on the topcoat and final repair records.

3) As an alternative to daily material usage records, the owner or operator may utilize material usage factor of 0.5% of topcoat usage.

4) Calculations shall incorporate control efficiency and shall include downtime adjustments to account for increased emissions during the period the afterburners were not operating. The owner or operator shall also maintain records of control devices downtimes and bypasses, including the date and duration of each occurrence.

ii. The owner or operator shall continuously record the incinerator combustion temperature during coating operations for thermal incineration or the gas temperature upstream and downstream of the incinerator catalyst bed during coating operations for catalytic incineration

iii. Record the temperature and frequency during operation of any coating operation specified in Specific Condition S2.a.ii.

b. **PM**

i. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.

ii. Proper operation of the fabric filter shall be ensured by maintaining records of inspections and routine maintenance activities and shall make these records available to the District upon request. A demonstration that proper operation of the fabric filter has occurred satisfies this compliance requirement for the standard specified in S1.b.ii. above.

c. **Opacity**

See Specific Condition S3.b.

d. **HAP**

See LAP Ford Motor Company MACT Recordkeeping Section.

e. **NO_x**

There are no record keeping requirements for NO_x compliance. (See Comment 2)

f. **TAC**

i. The owner or operator shall keep a record of the Material Safety Data Sheet (MSDS) for each TAC-containing material in this emission unit.

ii. The owner or operator shall maintain records that identify all periods of bypassing the control devices while the surface coating operations are in operation for a given day. The records shall include the date, duration (including start and stop time) of each bypass event, identification of the control device and process equipment in operation, and the total lb/hr emissions of each TAC from each piece of equipment during each bypass event, if that control equipment is required to meet the EA goals. (See Comment 4)

iii. See Specific Conditions S3.a.i.(4)

S4. **Reporting** (Regulation 2.16, section. 4.1.9.3)

a. **VOC**

i. See General Permit Reporting Requirements.

ii. For the control devices, the owner or operator shall clearly identify all deviations from permit requirements. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration including the following information:

1) Emission Unit number and Control ID number;
2) The beginning and ending date of the reporting period;
3) Identification of the operating parameters being monitored;
4) Number, duration, and cause of all exceedances of the parameters; and
5) Description of the corrective action taken for each exceedance.

iii. Perform reporting for VOCs for 40 CFR 60.395 and 1.05, Section 4:

1) The owner or operator shall report the volume weighted average mass of VOC per volume of applied coating solids for each affected facility.
2) For thermal incinerators, every three-hour period shall be reported during which the average temperature measured is more than 28 °C less than the average temperature during the most recent control device performance test.
3) For catalytic incinerators, every three-hour period shall be reported during which the average temperature immediately before the catalyst bed, when the coating system is operational, is more than 28 °C less than the average temperature immediately before the catalyst bed during the most recent control device performance test at which destruction efficiency was determined. In addition, every three-hour period shall be reported each quarter during which the average temperature difference across the catalyst bed when the coating system is operational is less than 80 percent of the average temperature difference of the device during the most recent control device performance test at which destruction efficiency was determined.
4) For thermal and catalytic incinerators, if no such periods occur, the owner or operator shall submit a negative report.
5) The owner or operator shall notify the Administrator 30 days in advance of any test by Method 25.

iv. Report all instances of non-compliance to the District no later than (15) days after the occurrence has been confirmed, notwithstanding Regulation 1.07.

b. **PM**

Any deviation from the requirement to perform monthly visible inspections of the scuff booth PM filter system.

c. **Opacity**

See Specific Condition S4.b.

d. **HAP**

See LAP Ford Motor Company MACT Reporting Requirements.

e. **NO_x**

There are no reporting requirements for NO_x compliance. (See Comment 2)

f. **TAC**

i. The owner or operator shall submit a *plant-wide* emissions-based EA Demonstration to the District showing compliance with the *plant-wide* EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process when a change occurs that increases emissions above De minimus or previously modeled values.

ii. Identification of all periods of bypassing the control devices while the surface coating operations were in operation during a reporting period. The report shall include the date, duration (including start and stop time) of each bypass event, and the total lb/hr emissions of each TAC from each piece of equipment during each bypass event, if that control equipment is required to meet the EA goals. (See Comment 4)

iii. See Specific Conditions S4.a.ii.

U012 Comments

1. Compliance with this requirement is demonstrated through a mass balance approach or engineering estimate.

2. The District has performed a one-time NO_x compliance demonstration using AP-42 emission factors and combusting natural gas, and the emission standard cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

3. If Ford is in compliance with Regulation 6.17, section 3.3 VOC limit than they are in compliance with the 40 CFR 60 Subpart MM 60.3092 VOC limit.

4. The reported total lb/hr emissions of each TAC from each piece of equipment during each bypass event will be used to determine if each TAC claimed as de minimis pursuant to Regulation 5.01 Section 1.6 in Ford Motor Company Louisville Assembly Plant's current plant-wide emissions-based EA demonstration continue to meet the de minimis criteria specified in Section 1.6.4. Should emissions during a bypass event for a TAC claimed to be de minimis exceed the de minimis criteria, Ford Motor Company Louisville Assembly Plant shall submit an updated plant-wide emission-based EA Demonstration to the District showing compliance with the plant-wide EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process where the TAC emissions increase above de minimis values.

U013 Emission Unit Description: Plant-wide Gasoline Fueling

Federally Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
7.15	Standards of Performance for New Process Operations	1 through 6

U013 Applicable Regulations:

District Only Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.18	Rule Effectiveness	1 through 3
5.01	General Provisions	1 through 4
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U013 Emissions Points:

U013 Emission Points				
ID	**Description**	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E13A	Gasoline Tank #1	7.15	Stage I vapor recovery system	N/A
E13B	Gasoline Tank #2	7.15	Stage I vapor recovery system	N/A
E13C	Gasoline Tank #3	7.15	Stage I vapor recovery system	N/A
E13D	Two (2) Fueling Stations	See Comment 2 and 3	ORVR Equipped Vehicles	N/A

U013 Control Equipment: There are no control devices associated with Emission Unit U013.

U013 Specific Conditions:

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **VOC**

i. Storage tanks, Emission Points E13A through E13C, shall be equipped with the following: (Regulation 7.15, section 3.1)

a) A submerged fill pipe; (Regulation 7.15, section 3.1.1)

b) If the gasoline storage tank is equipped with a separate gauge well, a gauge well drop tube shall be installed which extends to within six inches of the bottom of the tank; (Regulation 7.15, section 3.1.2)

c) Vent line restrictions on the affected facility; and (Regulation 7.15, section 3.1.3)

d) Vapor balance system and vapor tight connections on the liquid fill and vapor return hoses. The cross-sectional area of the vapor return hose and any other vapor return passages in the circuit connecting the vapor space in the service station tank to that of the truck tank must be at least 50% of the liquid fill hose cross-sectional area for each tank and free of flow restrictions to achieve acceptable recovery. The vapor balance equipment must be maintained according to the manufacturer's specifications. The type, size and design of the vapor balance system are subject to the approval of the District. (Regulation 7.15, section 3.1.4)

b. **TAC**

The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels whether specifically established by modeling or derived from default de minimis levels. (Regulation 5.01, section 3.) (See Comment 1)

S2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. **VOC**

Storage tanks: To demonstrate ongoing compliance with Regulation 1.05, Section 4, the owner or operator shall monitor the quantity of gasoline used to fuel vehicles.

a) The owner or operator shall monthly:

1) Check the storage tank fill points for tightness;

2) If a two point vapor recovery system on the storage tank, check rubber gaskets for tears, verify spring loaded valves properly operate and tank refill caps have rubber gaskets in good condition; replace any damaged parts; and

b) The owner or operator shall annually:

Verify pressure vacuum valve on vent pipe is operating properly annually and replace any damaged part.

c) The owner or operator must complete all repairs within 5 working days.

b. **TAC**

See Comment 1.

S3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

i. The owner or operator shall record total monthly gasoline throughput and make these records available to the District upon request.

ii. The owner or operator shall maintain records of the monthly and annual inspections. These records shall contain the date and time of the inspection; who performed the inspection; and the results of the inspection.

b. **TAC**

The owner or operator shall keep a record of the Material Safety Data Sheet (MSDS) for each TAC-containing material in this emission unit. (See Comment 1)

S4. **Reporting** (Regulation 2.16, section. 4.1.9.3)

a. **VOC**

See General Permit Reporting Requirements.

b. **TAC**

There are no routine reporting requirements for this equipment. (See Comment 1)

U013 Comments

1. The emissions from a motor vehicle fueling or refueling process and process equipment for gasoline and other liquid fuels are de minimis under STAR. (Regulation 5.01, section 1.6.6.)

2. The District reviewed a letter dated January 18,2007 regarding the current applicability of Stage II Vapor Recovery. EPA has provided guidance that vehicle production plants doing initial fueling of vehicle comply with vapor recovery requirements by means of ORVR requirements for compliant vehicles. The District concurs that the external vapor recovery system as required by the applicable Title V operating permit for LAP is not required for fueling vehicles with ORVR.

3. Regulation 6.40 does not apply to the initial fueling of new motor vehicles at a motor vehicle assembly facility per section 2.1.2.

U014 and U022 Emission Unit Description: Paint Equipment Cleaning Operations

U014 and U022 Applicable Regulations:

Federally Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	1 though 4
7.25	Standards of Performance for New Source Using Volatile Organic Compounds	1 through 5
40 CFR 63 Subpart A	General Provisions	63.1 through 63.16
40 CFR 63 Subpart IIII	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	1, 2, 3, 4, 7 and 8

District Only Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.18	Rule Effectiveness	1 through 3
5.01	General Provisions	1 through 4
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U014 and U022 Emission Points:

U014 and U022 Emission Points				
ID	**Description**	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E14A	Paint Equipment Cleaning Booth	7.25	See Specific Conditions S1.a.	N/A
		40 CFR 63 Subpart IIII	Section 63.3094	
E22A	Paint Equipment Purging and Plant Cleaning	7.25	See Specific Conditions S1.a.	N/A
		40 CFR 63 Subpart IIII	Section 63.3094	
N/A	Solvent Metal Cleaning Equipment	6.18	See Specific Conditions S1.a.iii	N/A

U014 and U022 Control Devices: There are no control devices associated with Emission Unit U014 and U022.

U014 and U022 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **VOC**

i. Applicator Paint Purging: The automatic spray applicators will incorporate a purge paint and solvent recovery system that will collect the purged materials.

ii. The owner or operator of a cold cleaner to clean non-paint or non-sealer related equipment using volatile organic compounds (VOC) shall, install, maintain, and operate the control equipment as follows:

The cold cleaner shall be equipped with a tightly fitting cover that is free of cracks, holes, or other defects. If the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with 1 hand. (Regulation 6.18, section 4.1.1)

The cold cleaner shall be equipped with a drainage facility that is designed so that the solvent that drains off parts removed from the cleaner will return to the cold cleaner. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system. (Regulation 6.18, section 4.1.2)

A permanent, conspicuous label summarizing the operating requirements specified in Specific Condition S1.b. shall be installed on or near the cold cleaner. (Regulation 6.18, section 4.1.3)

If used, the solvent spray shall be a fluid stream, not a fine, atomized, or shower type spray, at a pressure that does not cause excessive splashing. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. Solvent flow shall be directed downward to avoid turbulence at the air-solvent interface and to prevent solvent from splashing outside of the cold cleaner. (Regulation 6.18, section 4.1.4)

Work area fans shall be located and positioned so that they do not blow across the opening of the cold cleaner. (Regulation 6.18, section 4.1.6)

The solvent-containing portion of the cold cleaner shall be free of all liquid leaks. Auxiliary cold cleaner equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible liquid leaks, visible tears, or cracks. (Regulation 6.18, section 4.1.8)

The owner or operator shall observe at all times the following operating

requirements: (Regulation 6.18, section 4.2)

Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the waste solvent can evaporate. Waste solvent shall be stored only in a covered container. A covered container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. (Regulation 6.18, section 4.2.1)

The solvent level in the cold cleaner shall not exceed the fill line. (Regulation 6.18, section 4.2.2)

The cold cleaner cover shall be closed whenever a part is not being handled in the cold cleaner. (Regulation 6.18, section 4.2.3)

Parts to be cleaned shall be racked or placed into the cold cleaner in a manner that will minimize drag-out losses. (Regulation 6.18, section 4.2.4)

Cleaned parts shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner. (Regulation 6.18, section 4.2.5)

A spill during solvent transfer shall be cleaned immediately, and the wipe rags or other sorbent material shall be immediately stored in a covered container for disposal or recycling, unless enclosed storage of these items is not allowed by fire protection authorities. (Regulation 6.18, section 4.2.6)

Sponges, fabric, wood, leather, paper products, and other absorbent material shall not be cleaned in a cold cleaner. (Regulation 6.18, section 4.2.7)

The owner or operator shall not operate a cold cleaner used to clean non-paint or non-sealer related equipment using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F). (Regulation 6.18, section 4.3.2)

b. **TAC**

The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels whether specifically established by modeling or derived from default de minimis levels. (Regulation 5.01, section 3.)

c. **HAP**

i. The owner or operator shall follow the work practices specified in 40 CFR 63 Subpart IIII, Specific Condition S1.b and c. to minimize VOC emissions from purge and cleaning operations.

ii. See LAP Ford Motor Company MACT Standards Section.

S2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. **VOC**

See Specific Condition S1.a.

b. **TAC**

See Specific Condition S3.b.

c. **HAP**

See LAP Ford Motor Company MACT Monitoring Section.

S3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

i. See Specific Condition S1.a.

ii. The owner or operator shall maintain records that include the following for each purchase: (Regulation 6.18, section 4.4.2)

1) The name and address of the solvent supplier,
2) The date of the purchase,
3) The type of the solvent, and
4) The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).

b. **TAC**

The owner or operator shall keep a record of the Material Safety Data Sheet (MSDS) for each TAC-containing material in this emission unit.

c. **HAP**

See LAP Ford Motor Company MACT Recordkeeping Section.

S4. **Reporting** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

See General Permit Reporting Requirements.

b. **TAC**

The owner or operator shall submit a *plant-wide* emissions-based EA Demonstration to the District showing compliance with the *plant-wide* EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process when a change occurs that increases emissions above De minimus or previously modeled values.

c. **HAP**

See LAP Ford Motor Company MACT Reporting Requirements.

U014 and U022 Comments

1. Specific Conditions involving work practice standards only have no monitoring, record keeping and reporting requirements, as such would be impractical.

2. The aqueous cold cleaners that contain no VOCs are not subject to Regulation 6.18.

U015 Emission Unit Description: Sealer Deck

U015 Applicable Regulations:

Federally Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
7.59	Standards of Performance for New Source Using Volatile Organic Compounds	1 through 5
40 CFR 63 Subpart A	General Provisions	63.1 through 63.16
40 CFR 63 Subpart IIII	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	1, 2, 3, 4, 7 and 8

District Only Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.18	Rule Effectiveness	1 through 3
5.01	General Provisions	1 through 4
5.02	Adoption of National Emission Standards for Hazardous Air Pollutants	1, 3, 4 and 5
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U015 Emission Points:

U015 Emission Points				
ID	**Description**	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E15A	Sealer Application	7.59	3.5 lbs/gal	N/A
N/A	Sealers and Deadeners (other than glass bonding)	40 CFR 63 Subpart IIII	Section 40 CFR 63.3090 (c) or 63.3091 (c) 0.01 lb VOC per lb of adhesive and sealer material	N/A

U015 Control Devices: There are no control devices associated with Emission Unit U015.

U015 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

a. **VOC**

i. The owner or operator shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of 3.5 lb VOC/gal of coating, excluding water and exempt solvents, as applied for extreme performance coatings. (Regulation 7.59, section 3.1.3)

ii. See Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL).

b. **TAC**

The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels whether specifically established by modeling or derived from default de minimis levels. (Regulation 5.01, section 3.)

c. **HAP**

See LAP Ford Motor Company MACT Standards Section.

S2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. **VOC**

See Specific Condition S3.a.

b. **TAC**

See Specific Condition S3.b.

c. **HAP**

See LAP Ford Motor Company MACT Monitoring Section.

S3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

i. The owner or operator of an affected facility subject to this regulation shall maintain records that include, but not be limited to, the following:

(Regulation 7.59, section 6.1)

1) The regulation and section number applicable to the affected facility for which the records are being maintained,

2) The application method and substrate type (metal, plastic, etc.),

3) The amount and type of coatings (including catalyst and reducer for multi-component coatings) and solvent (including exempt compounds) used at each point of application during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month,

4) The VOC content as applied in each coating and solvent,

5) The date, or usage record period, for each application of coating and solvent,

6) The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the averaging period. The District may specifically authorize the usage record to reflect a period longer than the compliance averaging period, with the usage prorated for each compliance averaging period by a method approved by the District. In this case, the usage record period shall not exceed 1 calendar month.

b. **TAC**

The owner or operator shall keep a record of the Material Safety Data Sheet (MSDS) for each TAC-containing material in this emission unit.

c. **HAP**

See LAP Ford Motor Company MACT Recordkeeping Section.

S4. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. **VOC**

See General Permit Reporting Requirements.

b. **TAC**

The owner or operator shall submit a *plant-wide* emissions-based EA Demonstration to the District showing compliance with the *plant-wide* EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process when a change occurs that increases emissions above De minimus or previously modeled values.

c. **HAP**

See LAP Ford Motor Company MACT Reporting Requirements.

U016 Emission Unit Description: Final Repair Spray Booth; infrared curing, and spot repair bays for repairing coating on vehicles

U016 Applicable Regulations:

Federally Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
7.01	General Provisions	7.2
7.08	Standards of Performance for New Process Operations	1 through 3
40 CFR 60 Subpart A	General Provisions	63.1 through 63.16
40 CFR 60 Subpart MM	National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations	60.390 through 60.397
40 CFR 63 Subpart A	General Provisions	63.1 through 63.16
40 CFR 63 Subpart IIII	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	1, 2, 3 ,4, 7 and 8

District Only Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
1.18	Rule Effectiveness	1 through 3
5.01	General Provisions	1 through 4
5.02	Adoption of National Emission Standards for Hazardous Air Pollutants	1, 3, 4 and 5
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U016 Emission Points:

U016 Emission Points				
ID	**Description**	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E16A	Final Repair Booth	40 CFR 60 Subpart MM	See Specific Conditions S1.a.	C16A
		6.17 and 7.01		
		7.08	< 20%	
			2.34 lb/hr	
		40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) final repair)	
E16B	Final Repair Oven	40 CFR 60 Subpart MM	See Specific Conditions S1.a.	N/A
		6.17 and 7.01		
		7.08	< 20%	
			< 300 ppm	
		40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) final repair)	

U016 Emission Points				
ID	**Description**	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E16C	Final Repair Spot Paint	40 CFR 60 Subpart MM	See Specific Conditions S1.a	N/A
		6.17 and 7.01		
		7.08	< 20%	
			2.34 lb/hr	
		40 CFR 63 Subpart IIII	a. 0.6 lbs HAP/GACS Or b. 1.1 lbs HAPs/GACS (the above limits are applicable to a group of emissions sources and are different depending upon whether compliance is demonstrated with (a) or without (b) final repair)	

U016 Control Devices:

ID	Description	Performance Indicator	Stack ID
C16A	Fabric Filter	N/A	S187 and S188

U016 Specific Conditions

1. **Standards** (Regulation 2.16, section 4.1.1)

a. **VOC**

i. The owner or operator shall be subject to the emission limit of 4.8 lbs VOC/gal (0.58 kg/l) of coating, less water and exempt solvents. (40 CFR60.3092, Regulation 7.01 section 7.2 and Regulation 6.1, section 3.4)

ii. See Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL).

b. **PM**

i. See Louisville Assembly Plant, Ford Motor Company Plant-wide Applicability Limit (PAL).

ii. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2) (See Comment 1)

iii. The owner or operator shall not operate the Final Repair Booth unless the particulate filters are installed and operating properly.

c. **Opacity**

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

d. **HAP**

See LAP Ford Motor Company MACT Standards Section.

e. **NOx**

The owner or operator shall not cause to be discharged into the atmosphere from any affected facility or from any air pollution control equipment installed on any affected facility any NO_x fumes in excess of 300 ppm by volume expressed as NO_2. (Regulation 7.08, section 4) (See Comment 2)

f. **TAC**

The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels whether specifically established by modeling or derived from default de minimis levels. (Regulation 5.01, section 3.)

S2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. **VOC**

i. Monitor ongoing compliance by calculating monthly, a daily a volume weighted average of the coatings used. Procedures used for this determination shall be those of ‘‘Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,’’ EPA–450/3–88–018 (Docket ID No. OAR–2002 -0093 and Docket ID No. A–2001–22)

ii. Use EPA Method 24 to determine the amount of VOC in the Coating. The following equation may be used as an alternate method to demonstrate compliance:

Where:

$$VOC_w = \sum_{i=1}^{n} \frac{V_i C_i}{V_t}$$

VOC_W = the daily weighted average coating VOC content, as applied; and less water and exempt solvents, expressed in pounds of VOC per gallon of coating.

n = number of different coatings used on a coating line a given day.

V_1 = the volume of each coating used on a coating line, as applied and less water and exempt solvents, a given day.

C_1 = the VOC content of each coating used on a coating line, as applied and less water and exempt solvents, a given day.

V_t = total volume of all coatings applied each day on a coating line, less water and exempt solvents.

iii. Meet the standards specified in 40 CFR 60.392, as calculated, using the prescribed transfer efficiency of 40 CFR 60.393(c)(1)(i)(C) for the monthly weighted average mass of VOC emitted per volume of applied coating solids.

b. **PM**

The owner or operator shall follow good operating practices for the particulate filters, including monthly inspection, routine maintenance as recommended by the manufacturer, and prompt repair of any defects.

c. **Opacity**

See Specific Condition S2.b.

d. **HAP**

See LAP Ford Motor Company MACT Monitoring Section.

e. **NO_x**

There are no monitoring requirements for NO_x compliance. (See Comment 2)

f. **TAC**

See Specific Condition S3.f.

S3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

Perform record keeping for VOCs for 40 CFR 60.395 and 1.05, Section 4:

1) Record monthly the daily quantity and type of paint withdrawn from the topcoat paint circulation system for use in the final repair operation using the methodology specified in S2.a.

2) Monthly, determine the daily VOC emissions based on the topcoat and final repair records.

3) As an alternative to daily material usage records, the owner or operator may utilize an appropriate material usage factor determined to be acceptable by the District. (See Comment 3)

4) The owner or operator shall continuously record the incinerator combustion temperature during coating operations for thermal incineration or the gas temperature upstream and downstream of the incinerator catalyst bed during coating operations for catalytic incineration.

b. **PM**

i. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.

ii. Proper operation of the fabric filter shall be ensured by maintaining records of inspections and routine maintenance activities and shall make these records available to the District upon request. A demonstration that

proper operation of the fabric filter has occurred satisfies this compliance requirement for the standard specified in S1.b.ii. above.

c. **Opacity**

See Specific Condition S3.b.

d. **HAP**

See LAP Ford Motor Company MACT Recordkeeping Section.

e. **NO_x**

There are no record keeping requirements for NO_x compliance. (See Comment 2)

f. **TAC**

The owner or operator shall keep a record of the Material Safety Data Sheet (MSDS) for each TAC-containing material in this emission unit.

S4. **Reporting** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

i. See General Permit Reporting Requirements.

ii. For the control devices, the owner or operator shall clearly identify all deviations from permit requirements. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration with the following information:

1) Emission Unit number and Control ID number;
2) The beginning and ending date of the reporting period;
3) Identification of the operating parameters being monitored;
4) Number, duration, and cause of all exceedances of the parameters; and
5) Description of the corrective action taken for each exceedance.

iii. Perform reporting for VOCs for 40 CFR 60.395 and 1.05, Section 4:

1) The owner or operator shall report the volume weighted average mass of VOC per volume of applied coating solids for each affected facility.
2) The owner or operator shall notify the Administrator 30 days in advance of any test by Method 25.

b. **PM**

i. Any deviation from the requirement to perform monthly visible inspections of the booth PM filter system;

ii. The dates that filters were replaced or a declaration that there were no filters replaced during the reporting period; and

iii. See General Permit Reporting Requirements.

c. **Opacity**

See Specific Condition S4.b.

d. **HAP**

See LAP Ford Motor Company MACT Reporting Requirements.

e. **NO_x**

There are no reporting requirements for NO_x compliance. (See Comment 2)

f. **TAC**

The owner or operator shall submit a *plant-wide* emissions-based EA Demonstration to the District showing compliance with the *plant-wide* EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process when a change occurs that increases emissions above De minimus or previously modeled values.

U016 Comment

1. Compliance with this requirement is demonstrated through a mass balance approach or engineering estimate.

2. The District has performed a one-time NO_x compliance demonstration using AP-42 emission factors and combusting natural gas, and the emission standard cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

3. The District has deemed 0.5% as an appropriate material usage factor for Emission Unit U016.

U023 Emission Unit Description: Phosphate Operation

U023 Applicable Regulations:

District Only Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
5.01	General Provisions	1 through 4
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U023 Emission Points:

U023 Emission Points				
ID	**Description**	**Applicable Requirement**	**Allowable Emission/ Equipment Standard**	**Control Device**
E1000	Phosphate	5.01	See Specific Conditions S3.	N/A
E1001	Phosphate Dump Tank	5.01	See Specific Conditions S3.	N/A

U023 Control Devices: There are no control devices associated with Emission Unit U023.

U023 Specific Conditions

S1. **Standards** (Regulation 2.16, section 4.1.1)

TAC

The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels whether specifically established by modeling or derived from default de minimis levels. (Regulation 5.01, section 3.)

S2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

TAC

See Specific Condition S3.

S3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

TAC

The owner or operator shall keep a record of the Material Safety Data Sheet (MSDS) for each TAC-containing material in this emission unit.

S4. **Reporting** (Regulation 2.16, section 4.1.9.2)

TAC

The owner or operator shall submit a *plant-wide* emissions-based EA Demonstration to the District showing compliance with the *plant-wide* EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process when a change occurs that increases emissions above De minimus or previously modeled values.

U025 Emission Unit Description: Twelve (12) Direct Heat Exchangers

U025 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	**Title**	**Applicable Sections**
7.08	Standards of Performance for New Indirect Heat Exchangers	1 through 4
6.42	Reasonable Available Control Technology Requirements for Major Volatile Organic Compound	1.2, and 2 through 5

District Only Enforceable Regulations		
Regulation	**Title**	**Applicable Sections**
5.01	General Provisions	1 through 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U025 Emission Points:

U025 Emission Points			
ID	**Description**	**Applicable Regulation**	**Control Device**
E25	Direct Heat Exchangers	5.21	N/A
		6.42	
		7.08	

U025 Control Devices: There are no control devices associated with Emission Unit U025.

U025 Specific Conditions

S1. **Standards** (Regulation 2.03, section 5.1)

a. **PM**

The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2) (See Comment 1)

b. **Opacity**

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

c. **NO_X**

i. The owner or operator shall not allow or cause the *plant-wide* NOx emissions to exceed 99 tons during any consecutive 12-month period in order to stay below NOx RACT applicability thresholds.

ii. The owner or operator shall not allow NOx emissions to exceed 300 ppm by volume expresses as NO_2. (Regulation 7.08, section 4.1.) (See Comment 4)

d. **TAC**

The owner or operator shall not allow any TAC emissions to exceed environmentally acceptable levels whether specifically established by modeling or derived from default de minimis levels. (Regulation 5.01, section 3.)

S2. **Monitoring** (Regulation 2.03, section 5.1)

a. **PM**

There are no monitoring requirements for PM compliance. (See Comment 1)

b. **Opacity**

See Comment 2.

c. **NOx**

See Specific Condition S3.c.

d. **TAC**

See Comment 3.

S3. **Record Keeping** (Regulation 2.03, section 5.1)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

a. **PM**

There are no record keeping requirements for PM compliance for this equipment. (See Comment 1)

b. **Opacity**

There are no record keeping requirements for Opacity compliance for this equipment. (See Comment 2)

c. **NOx**

i. The owner or operator shall calculate and record the monthly and 12 consecutive month *plant-wide* NOx emissions for each month in the report period.

ii. See Comment 4.

d. **TAC**

See Comment 3.

S4. **Reporting** (Regulation 2.03, section 5.1)

a. **PM**

See Comment 1.

b. **Opacity**

See Comment 2.

c. **NOx**

i. The owner or operator shall report the monthly and 12 consecutive month *plant-wide* NOx emissions for each month in the report period.

ii. See PAL Reporting Requirements.

d. **TAC**

The owner or operator shall submit a *plant-wide* emissions-based EA Demonstration to the District showing compliance with the *plant-wide* EA goals of 7.5 new and existing, 3.8 for all new combined, and 1 for each process when a change occurs that increases emissions above De minimus or previously modeled values.

U025 Comments

1. The District has performed a one-time PM compliance demonstration for the space heater, using AP-42 emission factors and combusting natural gas, and the emission standards cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements for this space heater with respect to PM emission limits.

2. The District has determined that using a natural gas fired boiler will inherently meet the 20% opacity standard. Therefore, the company is not required to perform periodic monitoring to demonstrate compliance with the opacity standard.

3. STAR Regulation 5.01, section 1.6.7 states the TACs from natural combustion are De Minimis.

4. The District performed a onetime compliance demonstration for NOx and the 300 ppm standard cannot be exceeded uncontrolled.

Ford LAP Plant-wide

Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

Off-permit Documents

Document	Date
Rule Effectiveness Plan	10 April 1995

Alternative Operating Scenarios

The owner or operator did not request to operate under any alternative operating scenarios in its Title V permit application.

Insignificant Activities		
Description	**Quantity**	**Basis**
Internal combustion engines fixed or mobile	Various	Regulation 2.02, Section 2.2
Presses extruding metal/mineral/wood	Various	Regulation 2.02, Section 2.3.1
Brazing, soldering or welding equipment	Various	Regulation 2.02, Section 2.3.4
Woodworking, except for conveying, hogging, or burning wood/sawdust	Various	Regulation 2.02, Section 2.3.5
Lab venting and exhaust systems (non radioactive materials)	Various	Regulation 2.02, Section 2.3.11
Ventilation systems - bakeries & restaurants	Various	Regulation 2.02, Section 2.3.12
Washing or drying fabricated metal or glass; non VOC use; no oil or solid fuel	Various	Regulation 2.02, Section 2.3.15
Residential/domestic equipment	Various	Regulation 2.02, Section 2.3.12
Portable diesel or gasoline storage tanks	Various	Regulation 2.02, Section 2.3.23

Insignificant Activities		
Description	**Quantity**	**Basis**
Diesel fuel storage tanks (emergency use only)	Various	Regulation 2.02, Section 2.3.25
Closed pressure storage vessels	2	Regulation 2.02, Section 2.3.26
Portable tote tanks for raw material shipment of solvent - based coatings	Various	Tote tanks are kept closed when not in use. Emissions from tanks are negligible, and are accounted for by process material balance.
Backup generators for emergency power. (< 500 hrs/year)	2	Generators normal use is very low and HP <500 HP.
Wastewater Pretreatment system.	1	Emissions insignificant
Fluid Fill (hydraulic fluids, oil, anti-freeze) and Lubricating operations.	Various	Emissions insignificant due to low vapor pressure of materials used.
Miscellaneous maintenance procedures including lubrication, grinding, cleaning, woodworking, etc.	Various	Negligible emissions
Direct heat exchangers < 1 MM Btu/ hr	Various	Regulation 2.02, Section 2.1.1

a. Insignificant Activities are only those activities or processes falling into the general categories defined in District Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Equipment associated with a specific operation or process (Emission Unit) shall be listed with the specific process even though there may be no applicable requirements. Information contained in the permit and permit summary shall clearly indicate that those items identified with negligible emissions have no applicable requirements.

b. Activities identified in District Regulation 2.02, Section 2, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source.

c. For all insignificant activities that emit regulated air pollutants for which the company has accepted a plant-wide synthetic minor limit, the company shall maintain sufficient records to calculate the emissions and report those emissions in the quarterly compliance reports and the annual emissions inventory report.

d. The Insignificant Activities table is correct as of the date the permit was proposed for review by the USEPA, Region 4. The company shall submit an updated list of

insignificant activities annually with the Title V compliance certification pursuant to District Regulation 2.16, section 4.3.5.3.6.

e. In lieu of recording annual throughputs for each Insignificant Activity, the owner or operator may elect to report the Potential To Emit quantity listed in the Insignificant Activities table as the annual emission for each piece of equipment, since the emissions from the source's Insignificant Activities are minor.

Ford Louisville Assembly Plant
Compliance Assurance Monitoring (CAM) Plan

PROCESS/OPERATIONAL RESTRICTION(S)

1. The thermal oxidizer used to control VOC emissions from the coating operations shall be operated to maintain a combustion chamber temperature of no more than 50 degrees Fahrenheit below the average combustion temperature during the most recent acceptable performance test and shall have a minimum design retention time of 0.5 seconds. The minimum temperature requirement may be based upon a 3 hour average. **(64.6(c)(1)(i),(ii))**

2. The carbon adsorber used to control VOC emissions from the coating operations shall be operated to maintain a desorption gas inlet temperature of no more than 15 degrees Fahrenheit below the average desorption gas inlet temperature during the most recent acceptable performance test. The minimum temperature requirement may be based upon a 3 hour average. **(64.6(c)(1)(i),(ii))**

3. When relying on add-on control devices to demonstrate compliance with the emission requirements of this permit (i.e., control efficiency credit), the permittee may use non-zero control efficiencies for any period of time in which a deviation or excursion (including a deviation during startup, shutdown, or malfunction) from an operating limit occurs. If compliance with the emission limits is achieved, then no enforceable deviation or excursion will have occurred. **(64.6(b))**

MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years.

1. Temperature measurements of the thermal oxidizer combustion chamber shall be made at least once every 15 minutes and recorded during operation of the associated coating operations. **(64.6(c)(1)(i),(ii))**

2. Temperature measurements of the concentrator desorption gas inlet shall be made and recorded at least once every 15 minutes during operation of the associated coating operations. **(64.6(c)(1)(i),(ii))**

3. If coating operations can continue operating during a control device bypass, the bypass shall be monitored such that the valve or closure method cannot be opened without creating an alarm condition for which a record shall be made. Records of the bypass line that was open and the length of time the bypass was open during operation of the associated coating operations shall be kept on file. **(64.3(a)(2))**

4. The CAM O&M plan shall be updated as necessary to reflect any necessary changes. All records and activities associated with the O&M plan shall be kept on file for a period of

at least five years. **(64.6(c)(1)(i),(ii), 64.7(e))**

REPORTING

1. Each quarterly report for monitoring and deviations shall identify the number, duration and cause of any excursions of these requirements and the corrective actions taken. If there were no excursions in the reporting period, then this report shall include a statement that there were no excursions. **(40 CFR 64.9(a)(2)(i))**

OTHER REQUIREMENT(S)

For the purposes of Compliance Assurance Monitoring (CAM), excursions will be defined as follows: **(64.6(c)(2))**

a. A temperature excursion is defined as a confirmed three-hour period during which the average fails to meet the specified temperature requirements.
b. A monitoring excursion is defined as a failure to properly monitor as required.
c. A monitoring excursion can also be defined as failure to properly implement and/or maintain the O&M plan.

Elements of an O&M plan – CAM

General – Keep records of maintenance inspections which include the dates of the inspections and the dates and reasons for repairs if made. The following items shall be addressed in an O&M Plan for each respective control device used to demonstrate compliance with applicable VOC emissions limits.

RTO's

- Validation of operation of each thermocouple a minimum of once every 12 months or thermocouple replacement.
- *Perform a heat exchange/heat transfer media inspection a minimum of once every 18 months, or
- *Perform an inspection of the valve seals condition once every 18 months and verify valve timing/synchronization through visual observation (or through an alarm system) once every 18 months.

Carbon Adsorbor

- Validation of operation of each thermocouple a minimum of once every 12 months or thermocouple replacement.
- Perform semi-annual observations to confirm that the carbon adsorbor is rotating (if a rotary carbon adsorbor) and that the desorption fan is operating.
- *Perform internal observation of adsorbent materials for contamination and erosion a minimum of once every 18 months.

- Observe and record the pressure drop across the carbon adsorbor a minimum of once every calendar quarter.

* This requirement is satisfied if a performance test (i.e., stack test) has been performed.

Attachment A:
Processes Added/Removed/Modified from Compliance
Ford Motor Company Louisville Assembly Plant

This sheet covers the period from _____ to _____

Emission Point (Note 1)	Equipment Description (Note 1)	Change Category (Note 1)	Equipment Action (Note 2)	Date of Action (Note 3)

Note 1: Description of equipment being added/removed/modified including emission point identification and category of change. This log shall include any equipment/process that is added or removed from the calculation of annual emissions.

Note 2: Any equipment being added, removed, or modified form the emissions must be listed.

Note 3: If equipment is being added, list date of commencement of operation (including startup). If equipment is being removed, list date of removal from installation.